Suzi Kerr: Countries that have solid climate policies. That's also an indicator. Those are good countries to invest in. They're countries that are going to have stable policies around their energy sectors and although yes, they may have more stringent regulations. They may also have more certainty of policy.

Robert Stavins: Welcome to Environmental Insights, a podcast from the Harvard Environmental Economics Program. I'm your host, Rob Stavins, a professor here at the Harvard Kennedy School and director of the Harvard Environmental Economics Program and our Harvard Project on Climate Agreements.

Robert Stavins: As listeners know, in these podcast episodes, I engage in conversations with leading experts from academia, private industry, government, and NGOs, with our focus always being on environmental economics and policy, typically within the realm of climate change policy.

Robert Stavins: Today, we're very fortunate to have with us someone who has had broad experience and broad internationally working on a variety of environmental issues from an economic perspective and I'm referring to my long-term colleague and friend, Suzi Kerr, who founded MOTU Economic and Public Policy Research in Wellington, New Zealand, and is now the chief economist of the Environmental Defense Fund in New York City. Suzi joins us today from New Zealand. Susie, welcome to Environmental Insights.

Suzi Kerr: Thank you Rob. It's a pleasure to be on.

Robert Stavins: So we're very interested to hear your thoughts about the economic dimensions of environmental and climate change policy. But before we talk about that, our listeners are always interested to know how it is you came to be where you are and where you've been. So we're going to go way back to get started. Where did you grow up?

Suzi Kerr: So I grew up in New Zealand and did my undergraduate there and New Zealand, as I'm sure you all know, is a country where the environment is very near-to-hand. So it's always been close to my heart.
natural endowment. So you finished. That was the University of Canterbury. Is that right?

Suzi Kerr: That's correct. And then after that, as you know, after working for awhile in the treasury in New Zealand, I came and did my PhD with Rob as one of my supervisors at Harvard.

Robert Stavins: At Harvard, and you graduated in 1995. What was your first job out of school?

Suzi Kerr: So my first job was teaching at the University of Maryland in the Agricultural Resource Economics. Really, I chose it partly so that I could learn more about the environmental economics because that was a relatively new field at the time and hadn't been my background.

Robert Stavins: So you were an assistant professor in that department and that's an excellent department but after some amount of time, I actually don't know how much time, you moved on and you spent time ... Am I right at RFF and at MIT and perhaps other places?

Suzi Kerr: Yeah. So I was at Maryland for about three years and then I actually got terrifically homesick and went back to New Zealand and created MOTU and then during my time at MOTU, I really wanted to keep my connections with the wonderful community that I'd found in the Northeast and so I was lucky to spend time at Resources For The Future.

Suzi Kerr: I spent most of a year at MIT and then I also spent some time at Stanford a bit later. So I sort of was lucky enough to have a career where I could go backwards and forwards between the U.S. And I also spent a year and a half in Latin America so getting that broader perspective. New Zealand's wonderful but it's unbelievably isolated.

Robert Stavins: Yeah. Indeed it is. I know that I tried to fly there a few times and had trouble getting there actually. So how did it happen that you founded a new institution, Motu Economic Research?

Suzi Kerr: Well, you've got to put part of it down to youthful optimism and naivety. I, and one of my colleagues, was in my economics class at Harvard, a labor economist, Dave Maré, and we both saw these wonderful institutes in the United States like the Urban Institute and Resources For The Future and Brookings and we thought it would be wonderful to work for somewhere like that but there's nothing like that in New Zealand. So we thought if Americans can create something like that, why don't we? So we went back to New Zealand and we created it.

Robert Stavins: And it's become extremely successful as far as I can see only once having been there to participate in something but having been a regular consumer of your research products and others that have come out.
Suzi Kerr: We're very pleased with how it's done and we've had a lot of wonderful support from some of my international colleagues including you, Rob.

Robert Stavins: Am I right that in early 2019, you joined EDF as its chief economist?


Robert Stavins: So that raises a question in my mind because whereas MOTU, at least as I understand it, is really an economic research think tank, not unlike Resources For The Future. EDF is very much an advocacy group. So I'm interested to know what has that transition been like for you?

Suzi Kerr: So in some ways it hasn't been a difficult transition. Some of my colleagues at EDFR are people I've worked with already before. So people like Ruben Lybowski and Nat Keohane, and my role at EDF is very much to provide the economic basis for the advocacy. So I'm not directly involved in advocacy myself but of course I've never been in an organization that does advocacy. So that's been a fantastic opportunity to be able to directly connect my work with people who are able to then take that next step and do the political advocacy around it and I don't always agree with everything they do with that, of course, and that's fine and good.

Robert Stavins: You know since you mentioned Ruben Lybowski and Nat Keohane, I can't help but point out that both are also Harvard PhDs. I think both in political economy and government and both were also students of mine and Nat was recently with us in a webinar that we did.

Robert Stavins: So let's turn then to substance, the economic dimensions of environmental policy. Suzi, when you were in New Zealand you carried out quite a bit of research on the country's emissions trading system as I recall. Can you say something about what were the highlights of your findings? I mean first describe the trading system and then what were some highlights of your findings from all of your research?

Suzi Kerr: Yes. So, because New Zealand is such a small country, I was involved in the design of the ETS from the beginning, from back in 1995, and New Zealand has a cap-and-trade system. It's very similar to the California cap and trade. It started in 2008. So, it was the second in the world and it's economy wide. It's what we call it upstream, so it covers nearly all ... well, basically all fossil fuels and most other emissions in New Zealand. And one of the highlights I think is that it covers the forestry sector and New Zealand is still probably the one that covers that most comprehensively.

Suzi Kerr: And because we were early, we were having to solve a lot of problems that really were only in the literature at the time. So things like output-based allocation, free allocation was something we did first and we didn't really know what we were doing. Small country, very tiny team implementing this sort of
stuff but also low consequence. A lot of what we were trying to do was experiment and learn so that others could learn from our experience.

Robert Stavins: Now with a small country, then that means that the concerns about the competitiveness effects of a cap-and-trade system or any climate policy for that matter were probably very prominent. You mentioned that you used an output-based updating allocation and I actually did not know that. Were there other aspects of how you addressed what must have been huge political concerns and concerns raised by private industry about competitiveness effects?

Suzi Kerr: Yeah. So it was a big issue, continues to be a big issue because of the nature of our competitors. We really try to dig into the extent to which there were leakage effects from climate policy as opposed to competitiveness issues because competitiveness issues really were about the effects on asset values and the way our system was created politically was it was an all sectors, all sources system.

Suzi Kerr: So it was sort of accepted that everybody was going to lose something out of the process and at the time it was about losing and I said that was very much the framing of was around cost. We weren't able to find any clear evidence that there was going to be leakage or that it was really very sensible to spend a lot of resources protecting it, but politically we had to, which is why we ended up with the output-based but you can't really do economics modeling of competitiveness issues in a country where there's two cement manufacturers and one steel and it becomes a little bit idiosyncratic.

Robert Stavins: Well, you mentioned two important words in terms of concerns about competitiveness with carbon pricing regimes – one was economics and one was politics. My general read of research with regard to the EOETS is that although politics, it's been a huge issue politically than in fact the system has not had significant impacts economically in terms of relocation new investments outside of the EU possibly in a few poster child sectors like Portland Cement Production but by-and-large, it tends to be more of a political issue than an economic issue.

Suzi Kerr: That is my impression. The evidence just isn't very strong and those who are concerned about it point out that the evidence is at very low carbon prices than we've had so far. So this might look quite different when we get to the carbon prices we really need.

Suzi Kerr: But I think there are so many things that drive the location of a company. The chances that an existing company would move seems fairly low. I think it's a different issue for developing countries where you're looking at new investment and really an investor has a lot of choices. So that may be more flexible but countries that have solid climate policies, that's also an indicator. Those are good countries to invest in. They're countries that are going to have stable policies around their energy sectors and although yes, they may have more stringent regulations. They may also have more certainty of policy and for
companies that certainty is often more important than the actual level of effective price.

Robert Stavins: Well, companies continue, and even more so now, to be concerned in Europe because of the fact that the EOETS is becoming more stringent over time, relying more on auctioning. So, for all those reasons, costs [are] increasing for European firms. I'm sure you're aware of the fact that a carbon border adjustment mechanism, the CBAM, is going to begin collecting data in 2023 to be implemented in 2025. What's your reaction to that?

Suzi Kerr: Well, it's been something we've been discussing for 20 years. It is a more elegant solution than the output-based allocation. It has much lower cost to taxpayers. It avoids some of the domestic distortions that you get with output-based allocations so that's good.

Suzi Kerr: The logistical issues of bringing in a CBAM are huge. If we all had carbon pricing, it would be pretty easy, but we don't. We have a whole mix of policies in different countries. Some have carbon pricing, but everybody has other policies. That complexity is huge, and the other issue is equity across countries. Does it really make sense for us to be charging countries who have low policy stringency because they're very poor and they haven't been able to bring that in yet.?

Suzi Kerr: And I think it's critically important that the EU couple any introduction of CBAM with really active support for the poorest countries so that they are supported to have a climate transition rather than expected to do that entirely on their own.

Robert Stavins: So it's interesting. You mentioned poor countries and in terms of just numbers of countries, they make up a majority of the parties to the United Nations Framework Convention on Climate Change and their perspective, which we hear voice regularly, regarding the Europe's proposed CBAM, is that this violates, in their view, the Paris Agreement. The whole structure of the Paris Agreement is that each country would state its own ambition and how it was going to achieve it and they view the CBAM as Europe forcing other countries to adopt its stringency or its policies. What's your reaction to that?

Suzi Kerr: Well as you know, the Paris Agreement isn't going to get us to 1.5 degrees, possibly not even to two. And so on the one hand, the developing countries are going to be most of the emissions very soon, if not already. So they're going to have to do reductions. The question is who's going to pay for that. Who's going to finance that and where does the CBAM fit into that?

Suzi Kerr: They don't have to bring in policies in response to the CBAM but of course they're going to potentially suffer if they don't, but that's why I think it's really important that this isn't just a stick. It's not a 'We're in the club and we're doing the right thing and you're not. So we're going to penalize you.'
Suzi Kerr: This is our ‘We’re getting ahead and it’s becoming difficult for us. So we need to provide some protection but we’ll work with you in order for you to join the club too and so that you can have the policies that you’re going to need to make the transition’ because if they wait too long to have a transition, it’s going to be very painful for those developing countries.

Robert Stavins: So that’s interesting. I want to depart from our chat about climate policy and go back to New Zealand, where you are now, and that’s because some of the world’s most important individual transferrable quota systems, ITQ systems for fisheries regulations, are located in New Zealand along with Iceland and my recollection is that you have studied those.

Robert Stavins: So two questions and our listeners may not know about ITQ systems. So can you give us a very brief explanation of what an ITQ system is for fisheries? And then again, what are some of the key findings from the research you’ve done?

Suzi Kerr: An ITQ system is an individual transferrable quota system. At EDF, we call them catch shares, which is a little bit of an easier title. So essentially what it puts on is a limit on the total number of tons of fish that can be caught in a given period of time and then it shares that limit as quota among the fishermen.

Suzi Kerr: And what we have found from our research, which is quite a few years back now, was that the system basically did operate as it was intended to. There is evidence that it leads to economic gains. It leads to improvements in sustainability, but I think that the contention that surrounds these systems now is really about the equity implications. Who is it who ends up actually owning those quota and owning those property rights? And that was something that was problematic initially in the New Zealand system where they were given to boat owners and that’s been a problem in other systems as well and it’s also a problem over time as is ownership tends to get concentrated of these quota.

Robert Stavins: Right, which is what one would anticipate because the most efficient operations, which are going to be the larger operations, typically not the mom and pop one-boat operations, are going to tend to buy up the allowances.

Suzi Kerr: Yes. They will tend to. They have the capital to do so, et cetera.

Robert Stavins: So, I want to make a connection now if I could between New Zealand and the United States, which you experienced and that’s because when you moved from MOTU to EDF in early 2019, Jacinda Ardern was and is New Zealand’s Prime Minister and the U.S. President then was one Donald Trump. I cannot imagine two national leaders, two heads of state who are more different than the prime minister Ardern and former president Trump. What was like for you to make that transition?

Suzi Kerr: Well, I got laughed at by a lot of my colleagues who thought I was doing something very strange. I think the biggest difference is between somebody
whose approach to every issue has been to encourage people to be kind and to think what is the kind response as a human being to other human beings, to a very, very different world, which is ... I won't even begin to try to characterize it. I think you can all do that yourselves.

Robert Stavins: Indeed and speaking of that. Can I ask you what is the status now with COVID in New Zealand? You were doing spectacularly well for quite a while. Is that still the case? I just don't know.

Suzi Kerr: Just in the last few days we've gone back into complete lockdown because there are a few cases in New Zealand and until then it was completely open. You had to wear a mask on public transport but that was basically the only constraint and so we're hoping that this extremely strict lockdown will have the same effect as last time, that we'll actually obliterate it again. But you know at some point New Zealand's going to have to open up again. It's pretty constrained in terms of international travel and so on. But yes, we've been extremely lucky.

Robert Stavins: But currently it's closed to incoming international travel. Is that right?

Suzi Kerr: You can come into New Zealand if you're a New Zealand citizen, but you do need to go through a managed quarantine process, which is very, very strict and currently at the moment, I can only go to the supermarket or to a doctor.

Robert Stavins: Well, I hope all of that improves soon.

Suzi Kerr: Well, relative to everywhere else in the world, we consider ourselves extremely lucky.

Robert Stavins: Yeah. Well that's also true of the U.S. I mean we're very well off here. You think about all the countries. Here we are complaining about the fact that we're at about 70% vaccination of people over a certain age who are most susceptible, 90% of people over 70, and then you think about countries, all of Sub-Saharan Africa and many other parts of the world that are one to five or maybe 10% vaccination levels.

Suzi Kerr: It's inconceivable. Yeah and they don't have the sort of leadership that we've been lucky to have.

Robert Stavins: Right. Now. Speaking of Mr. Trump, he of course withdrew the United States from the Paris Climate Agreement in November 4th, 2020. On Inauguration Day, January 20th, incoming president Biden began the process of rejoining 30 days later, February 29th, the United States was again a party of the agreement but that was the easy part.

Robert Stavins: The hard part's coming up, of course, with a credible statement of how much U.S. emissions of greenhouse gases will be reduced and how it would be accomplished in a so-called nationally determined contribution or NDC, as you
well know. Now the Biden Administration announced its new NDC a few months ago, a pledge to cut greenhouse gas emissions by 50 to 52 percent below the 2005 level by 2030.

Robert Stavins: That's an impressive target. That's been celebrated by greens in the U.S., Europeans, and perhaps others. But my question for you is whether or not you judge that to be credible and when I say credible, I mean achievable with reasonably anticipated policy actions, not hoped for policy actions but reasonably anticipated ones. What do you say to that?

Suzi Kerr: Well, I think as we all know, the research and the modeling all says it can be done. It's certainly possible and a lot of it can even be done at very low cost. Whether it will be done is a much more challenging question and that's where it gets really hard, actually implementing the policies that are effective. Even if you have the political will, that's a difficult thing and I suspect people that are being too optimistic about that.

Suzi Kerr: Certainly our teams are working extremely hard to get in their policy set that will lead to this sort of change. I think without having some sort of enforceable cap, we can't guarantee that those policies will be effective. I think, in general, history teaches us that policies are almost always less effective than we think they're going to be.

Robert Stavins: Right and major new climate legislation, unless you would refer to the new economic package that's in the House, unless you refer to that as climate legislation, that seems not to be in the cards although the infrastructure package, which is more promising politically on this date that would have some effects on climate, on greenhouse gas emissions, wouldn't it?

Suzi Kerr: Yes and some of that is absolutely critical action in order to enable the private sector and others and the states to actually have effective actions. So it's a foundational part. It's not enough on its own. This is going to need the private sector. It's going to need states and it's going to need federal action all to work together in a more aggressive way than we're currently seeing but you can't leap in then suddenly do this stuff all at once. You do have to get some level of broad agreement or otherwise the policies just get reversed later and that's not going to lead to the investment we need.

Robert Stavins: Yeah and talking about the policies getting reversed. Sometimes I hear my European friends and colleagues refer to the whiplash effect of going from the George W. Bush Administration to the Obama Administration to the Trump Administration to the Biden Administration, both in terms of participating in the international negotiations and in terms of domestic U.S. rhetoric and domestic U.S. action on climate change.

Robert Stavins: That's particularly the case when one moves away from statutory action with the Congress, which is not so easy to reverse, and instead we turn to regulatory
approaches, which of course the Obama Administration did and the new Biden Administration is doing.

Robert Stavins: A concern that I've had but maybe you're going to tell me that I'm too pessimistic and if you think so, I'd love to hear that. A concern I've had is that it could be much harder to put in place rulemakings during the Biden Administration years then during the Obama years because of court challenges being much more likely now to succeed because Mr. Trump appointed 224 federal judges, which is more than 25% of the total and now there's this Supreme Court conservative majority which favors a literal reading of statutes, which presumably will give less flexibility to interpret the statutes in innovative ways such as concluding that the Clean Air Act article that focused on localized air pollutants applies to carbon dioxide and climate change.

Robert Stavins: In fact, I've heard it said, I have no insight information, but I've heard it says that the Chevron Doctrine, which your lawyer colleagues at EDF probably considered to be extremely important because of the deference it gives to agency interpretations of statutes, might even be overturned by this Supreme Court.

Robert Stavins: So am I excessively pessimistic about the possibilities of meaningful regulatory actions during the Biden Administration?

Suzi Kerr: You're getting quite a way out of my expertise here Rob. All I can say is that I think the EDF legal team is outstanding. They work with outstanding legal teams and other places. They had a surprising level of success under Trump in protecting some of the environmental regulations. I'm just hopeful they can carry that through into the really important precedent-setting regulations that we need going forward.

Robert Stavins: And it was a huge level of success during the Trump years. Ricky Revesz from NYU was on with us a while ago and he pointed out that with every administration there are challenges to regulation either from the environmental advocacy community, with a Republican administration or from private industry when there's a democratic administration, but the level of success of that litigation, it does not vary a tremendous amount.

Robert Stavins: I think it was something like ... I think he said something in the order of 20 to 30 percent or less even. But that during the Trump years, it was like 75 to 80 percent success of litigation challenging the regulatory of moves because they just weren't apparently very well-designed. I don't know.

Suzi Kerr: Yes and that's one of the wonderful things about the U.S. system is that it has these checks and balances that you do actually have to justify regulations and you have to justify removal of regulations and so that provides the opportunity for rationality to prevail even when politics are going a bit weird.
Robert Stavins: Well we sure hope so. Let me turn to ask you finally a broader question that I'd love to know your thoughts about. Something that we've seen, particularly in the year 2019 dimmed a bit during COVID, but coming back.

Robert Stavins: Something we've seen for sure has been the rise of these youth movements of climate activism in Europe and the United States, perhaps in New Zealand and other parts of the world. What's your reaction to those youth movements?

Suzi Kerr: I think they're brilliant. I think they're a marvelous thing. They were strong in New Zealand and I was able to see very much the effect that they had on some of the key industry stakeholders. Essentially their children were saying to them what are you doing dad? What are you doing mom? And that brought them to the table in a way that they really weren't before.

Suzi Kerr: On the downside, these people are very young and they are being thrown into a terrifically complex and often contentious and emotionally-charged environment and the cost to them in terms of their own resilience has been very high over time. I think Greta Thunberg is extraordinary in the way she's been able to persist here, but I've seen quite a lot of burnout, and so I think we need to support those young people and support them to be really effective in what they do but also to be kids and to grow up, not expect them to suddenly turn into adults advocates.

Robert Stavins: You know, we've seen, Suzi, a lot of that contrast in the last couple of weeks. In London, with the Extinction Rebellion condemning even of the United Kingdom, which in terms, at least, of its renewed NDC is out front in terms of ambition. I don't know if they'll live up to it but it's been dramatic.

Robert Stavins: A question that I have about the youth movements, and maybe you have some insights into this, is whether or not this is an age effect or a cohort effect. In other words, as they get older, will they carry forward the same degree of passion about climate change or will that be somewhat diminished as they get older? Do you have any thoughts on that to wrap this up?

Suzi Kerr: I think there's inevitably an age effect in here that when you're younger, things are more black and white and you've got the enthusiasm. You don't have any guilt about things that you did in your past and that will be common. I hope we can turn that into a cohort effect by enabling them to make this something they build into their careers and I'm seeing this in some of the young people I've worked with.

Suzi Kerr: I think often people burn out because they have all that idealism and then they get into a job and they can't see how to express it and they feel knocked down. So if we can support them to hold on to that idealism, then maybe we can make this a cohort effect and maybe we can help them make this a cohort effect.
Robert Stavins: Well, that's a valuable objective that I fully endorse, working in a university and personally for that matter and we're going to end with that. So thank you very much Suzi for having taken time to join us today.

Suzi Kerr: Thank you so much Rob. It's always lovely to talk to you.

Robert Stavins: So, thanks again to our guest today, Suzi Kerr, the Chief Economist at the Environmental Defense Fund. Please join us for the next episode of Environmental Insights: Conversations on Policy and Practice from the Harvard Environmental Economics Program. I'm your host, Rob Stavins. Thanks for listening.

Announcer: Environmental Insights is a production from the Harvard Environmental Economics Program. For more information on our research, events, and programming, visit our website, www.heep.hks.harvard.edu.