Navroz Dubash: Climate change in a sense is now a problem with a clock. We have a ticking clock if you're going to meet two degrees, and even more so if you meet to meet 1.5 degrees. It's not enough for every country to do what they can. We have to be measuring progress against what is determined to be necessary by science.

Rob 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 Environmental Economics Program and the Harvard Project on Climate Agreements. As listeners to these podcast episodes know, I engage in conversations with leading experts from academia, private industry, government, and NGOs, with our focus always on environmental economics and policy, typically, within the realm of climate change policy.

Rob Stavins: Today, we're fortunate to have with us, someone with experience in at least three of those sectors, academia, NGOs, and government institutions, and someone who is exceptionally well qualified to talk about the governance and politics of climate change policy. I'm referring to my colleague and friend Navroz Dubash, professor at the Centre for Policy Research in New Delhi, coordinating lead author and working group three of the Sixth Assessment Report of the Intergovernmental Panel on Climate Change and a former senior associate and policy analyst, respectively, at the World Resources Institute and the Environmental Defense Fund. Navroz, welcome to Environmental Insights.

Navroz Dubash: Thank you so much, Rob. It's really wonderful to be here on this show with you.

Rob Stavins: So, I'm very interested to hear your impressions about the institutional dimensions of climate change policy. But before we get into that, our listeners are always interested to know how people such as yourself came to be where you are and where you've been. So where did you grow up?

Navroz Dubash: Well, Rob, I won't give you the full story, but I grew up largely in India with a few years in the UK while my father was working in the Indian Embassy there. I went to college in the US and I've been back in India for about getting on 20 years now.

Rob Stavins: And college in the US was at Princeton, is that correct?

Navroz Dubash: That's correct, yes.
Rob Stavins: And your bachelor’s degree is in public and international affairs. What does that consist of?

Navroz Dubash: Well, most South Asians who can manage end up studying engineering, it’s sort of the South Asian path as it were.

Rob Stavins: Right.

Navroz Dubash: And I started out doing that and I found myself more drawn to economics, politics, sociology, and I was fortunate to have the option of jumping ship and joining the Woodrow Wilson School of Public Policy. And so and I enjoyed that a great deal.

Rob Stavins: Oh, good for you. I didn't realize that. So now graduate school was at the university of California, Berkeley?

Navroz Dubash: Yes, indeed. At a niche program that is well known in the environmental community, but not necessarily outside the environmental community called the Energy and Resources Group founded in fact, by your colleague, John Holdren.

Rob Stavins: Absolutely. And for that reason, I'm somewhat familiar with it. But probably not all of our listeners are, as you suggested. So, can you give us a very brief description of the Energy and Resources Group?

Navroz Dubash: No, certainly. It's a really interesting program. It was founded around the time of the oil crises with the underlying idea being that environment, environmental and resource questions really required an interdisciplinary approach across in engineering, natural sciences, and the social sciences. And so it's a small group of professors who got together to found this program.

Navroz Dubash: And as a student, you work with those professors, but you can also work more broadly across the Berkeley campus. So I had an economist, a sociologist, and a geographer on my dissertation committee, now of course, many years ago. But that gives you an example of the sort of breadth that we were allowed to bring to our education.

Rob Stavins: And who were those three people you’re referencing?

Navroz Dubash: So I was looking at, I was very keen on looking at village level issues in India. And so I had a micro economist from India, Pranab Bardhan, a well-known economic geographer, Michael Watts, and a sociologist Rachel Schurman.

Rob Stavins: Oh, that is interesting. That's a diverse committee indeed. So what was your first job out of school?
Navroz Dubash: Well, the first job out of school actually plugs right into this conversation, Rob. Because as an undergrad at Princeton, students are encouraged to do a policy conference and a policy task force. And mine was actually on climate change. And that was in 1989, well before these negotiations that we've both been tracking actually got started.

Rob Stavins: Right.

Navroz Dubash: And when I got out of, out of college, I was looking around for a job. I'd spent my time traveling through the Narmada Valley, which is a site of a very contentious dam project. And so I tried to get a job at the Environmental Defense Fund, which actually was working with activists in that area.

Navroz Dubash: And at EDF, they told me, “Look, we don't have a job in that program, but we do have one in our climate program. And we are looking for somebody to set up a global network because we think that there are going to be global negotiations starting up on climate change.” And so, at the ripe old age of 21, I was hired to establish what became the Climate Action Network straight out of college. And so I was the-

Rob Stavins: Interesting.

Navroz Dubash: First international coordinator of Climate Action Network or CAN, which is now a very large network.

Rob Stavins: So you and I share something additional. I wasn't aware of that, because I also worked for the Environmental Defense Fund. I worked full time for them for a couple of years.

Navroz Dubash: Right. I know I wasn't aware that.

Rob Stavins: Yeah, but mine was not on climate change policy, it was out in California years before you were with them. I was working on California water policy, which as you know, is a huge issue in that state. So now what's the path that eventually took you to the Centre for Policy Research? I imagine there are a number of stops along the way.

Navroz Dubash: Well, a couple. So I had two absolutely fabulous years from 1990 to 1992 working with EDF and coordinating this network. And that culminated in the Earth Summit in 1992. And I really felt deeply inadequate all through those two years. I felt I didn't know enough, didn't have enough experience, knowledge. And I determined to go back to grad school and actually immerse myself in a much more in fundamental concepts and understandings.

Navroz Dubash: And so I did that for several years. And when I emerged, I joined the World Resources Institute and I was working on something quite different, looking at financial flows and the environment, looking at the spread of institutions like
regulators around the world and how that shaped the flows of money that then shaped internal resource use.

Navroz Dubash: And after a few years of doing this, my partner and I decided, look, if we are ever going to take the plunge and go back to India, this is the moment. And so, we went back in around 2003 and after jumping around a few places, I found that the Centre for Policy Research gave me a really solid platform and a very open, welcoming, and intellectually stimulating space to build a program. And so, over the last 10 years I've been building a research program around climate change, energy, electricity, and air pollution. And that's what I'm doing today.

Rob Stavins: And for anyone who's not familiar with it, can you tell us a bit about the Centre for Policy Research?

Navroz Dubash: Oh, absolutely. So, CPR is one of the older think tanks in the Delhi landscape. We are coming up on 50 years. So we've been around for a while. It is a multidisciplinary think tank. So people from different disciplines, but also working on different issue areas. So we have a very strong political science team, for example, look at electoral politics and political trends.

Navroz Dubash: We look at urbanization, foreign policy in the South Asia region and beyond. We have obviously a big environment program and we have a program on law and regulation. So one of the things that distinguishes us a little bit is that we tend to be perhaps slightly more academically oriented. Most of us publish quite widely, and we try and do policy research on the back of that academic and published analysis. We see that as a form of discipline.

Rob Stavins: So, would you say it's somewhat similar to the Brookings Institution in the US? Is that a fair comparison?

Navroz Dubash: Potentially. Potentially. You could say that, I would say that we are perhaps a little less closely identified with any particular political party in the spectrum.

Rob Stavins: Ah, good point.

Navroz Dubash: Than the Brookings Institution is perceived to be, perhaps.

Rob Stavins: I bring it up because Brooking sort of combines political scientists and economists, and then some other disciplines as well. But that's a good point that it is certainly has a partisan identification. Something else that you and I share of is having been involved in the Intergovernmental Panel on Climate Change.

Rob Stavins: And we've had a number of guests who have served in various capacities on the IPCC, but we've never really talked about it. Now, anyone who follows climate change policy as our listeners do, has certainly heard about the IPCC and its reports, but they not actually know what the IPCC is and what it does. Can you offer a brief primer on that?
Navroz Dubash: I can do my best. I will say that we just submitted our chapter and so I'm a little bit shell shocked at the moment. But I'll try and sort of move past that. So, the IPCC is I think actually quite fascinating body. It is in a sense authorized by governments, but it is composed of independent academics, sometimes nominated by peers, sometimes nominated by governments. And our job is to assess. And I use that word carefully, assess rather than review the literature.

Navroz Dubash: So, you assess the literature across three different areas, there's a working group on the science, a working group on impacts and a working group on the response strategies that you and I have both been involved in. And so we work in teams of researchers, multidisciplinary teams, across geographies with an effort to make each of these teams diverse. So our chapter had, I think on the order of 11 or 12 authors. And over several years, we've pulled together the literature and assess what it implies for policy.

Navroz Dubash: It's very important that IPCC chapters are policy relevant, but do not cross a line over to being policy prescriptive. So that's kind of one of the fundamental tenants. And the other is that the rigor is maintained through multiple rounds of review. So we've had three rounds of review by peers, by governments. And each time we've had on the order of a thousand plus, 1,000 to 1,200 comments, each of which we've had to reply to line by line. So as with any process, it's not infallible, but there are several checks. And I think it's a pretty robust process. And personally I've learned a lot from being part of the IPC.

Rob Stavins: Yeah. So I certainly have as well over the years, particularly through what that last stage you mentioned, which are the government approval sessions. Because the panel, an intergovernmental panel, actually refers to the countries, not to the academics who are essentially drafting a report in terms of this summary for policymakers. So it's an interesting relationship I found.

Navroz Dubash: It is indeed. And in fact, as you mentioned, the final approval process is a process through which the scientists actually present in a sense their findings and the governments go back and forth with them to seek clarification, interpretation. And of course, science is not an absolute thing. You can present the same data two or three different ways.

Rob Stavins: Right.

Navroz Dubash: And the governments are often very probing because alternative implications of data presentation carry different political... potentially political outcomes. And so they're obviously very attuned to that. And so, our job is to be aware of the political context, but not in a sense pander to it while making sure that the representation is true to the underlying science and information base. So it's an interesting process.

Rob Stavins: So that takes us conveniently to thinking about the institutional dimensions of climate change policy, which is one of the aspects of the chapter that you've
been leading at the IPCC. Now you followed the politics of climate change policy, not only in India, but in other parts of the world. Can you say something about any key sort of generic insights? So, not specific to India, but generic insights that have emerged from your studies over many years of the institutional and political dimensions of climate change policy.

Navroz Dubash: Yes. I think this is, I got interested in this set of issues because I find it is really quite understudied compared to say the study and analysis of targets, emission targets, or emission policies, which of course you work on a great deal.

Rob Stavins: Right.

Navroz Dubash: And the argument that I've slowly come to, to make on why institutions are important is that if you think of a target for the future. These days, people talk a lot about net zero targets. What is the mechanism through which future targets translate into current action? There needs to be some kind of interlinking mechanism through which we both decide what target is reasonable, as well as think back to what we have to do today in order to achieve those targets. And if there are obstacles to that action, how we overcome those obstacles? All of those tasks really require institutions. And by institutions, I mean, both organizational forms and rules of the road.

Navroz Dubash: So, we might need climate laws; we might need coordinating bodies. So let me give you a couple of the two or three sort of crisp insights that I think are worth thinking about. Because climate change in a sense is now a problem with a clock. We have a ticking clock if you're going to meet two degrees, and even more so if you meet 1.5 degrees. It's not enough for every country to do what they can. We have to be measuring progress against what is determined to be necessary by science. So we have to have some process through which policies and actions are assessed and evaluated.

Navroz Dubash: We need to have a strategic dimension to those policies. And those aren't just for the energy sector, they're actually across the whole economy because agriculture matters to climate change, both on the mitigation and adaptation side; urbanization matters and on and on. And so you need coordinating bodies. And if you think about most countries, they're organized in departmental silos. So how does all this come together? How do the interactions between decisions get decided? So there's a strategy element, there's a coordination element, and the third element really is that addressing climate change is going to create winners and losers. And losers are going to try and block progress.

Navroz Dubash: So you need to find ways of mediating conflict between potential winners and potential losers. Losers need to be paid off or be shown or be sort of brought to the table in ways that they don't feel the need to register opposition. Potentially new emergent industries like the renewable energy industry needs spaces where they can articulate their interests. All of this also takes institutions. So the stuff, the place where climate policy needs to happen is really the institutional
Rob Stavins: No, it’s very, very helpful, which makes me think about two very important countries in climate change policy, China and India. In the past, oftentimes people and perhaps myself who didn't know better thought of those as two countries who could sort of be labeled the same, could be put in the same category. But in fact, politically it’s hard to think of two countries that are more different.

Rob Stavins: We have the largest democracy in the world and the largest autocracy in the world that are very different economically in terms of per capita income, in terms of percentage of the population that's in poverty, that are very different in terms of their emissions and their energy portfolios. Can you comment on that, on the differences between the two countries?

Navroz Dubash: Yes. I think the China, India question occupies us in India quite a lot in terms of climate politics, but also beyond that, in terms of economic development. I mean, China has shown remarkable growth and probably at an even more rapid speed since its succession to the WTO at the turn of the turn of the century. And we do get lumped together a lot in climate politics because we are the two Asian giants.

Navroz Dubash: But if you look at some of the aspects of difference you talked about, for example, just per capita emissions or emissions per person, India is at around two tons per person, which is well below the global average of around four. And China is now at or above European levels at about seven tons, seven tons per person. And that's because it has grown extremely rapidly in the last few years. But in terms of climate politics, there's another interesting observation, right? In a sense, China has now over the last 20 years built up its infrastructure to the point where it can start thinking about in a sense what the transition is to a low carbon future.

Navroz Dubash: India has actually not built up its infrastructure. And we are an interesting place because our emissions are likely to grow for a while longer in order to meet development needs. Now, the trick is going to be how can India do this with a shallower increase in emissions than China exhibited? So China's trajectory was a bit like going up the slope of a mountain. India's has be more like a hill where we peak our emissions at a lower level and sooner. Now, in a sense, India is also fortunate because we've not locked in this infrastructure.

Navroz Dubash: And we still have a headroom for energy, per capita energy growth at a time when renewable is cheaper than coal-based energy. So we have a chance to actually lock in a low carbon future. Whereas, China actually locked in a high carbon future and is now trying to unwind it. So that's a possible advantage, but the disadvantage is that India's a messy and chaotic democracy. And that transition is something that is only incompletely control by governments. So I'll give you one example, right?
Navroz Dubash: If we were to move away from coal-based electricity, it has ripple effects throughout the economy. It has effects on regional economies, like in many countries, including the US with your West Virginia coal mines and so on. But it also has effects through cross subsidies of coal transport that subsidize passenger rail in India, which is politically really important for a country that is really built around economic migrants. So, if you take away that subsidy, the rail ways collapses. Public sector banks have been kind of pressured into lending for coal fired power plants.

Navroz Dubash: So the banking sector is vulnerable to those shifts. And our fiscal situation is strongly dependent on fossil fuel taxes. So to unwind a coal or fossil economy actually will have ripple effects throughout the larger political economy of India. And so that it's not just the economic costs that matter, but also the transaction costs. And I know this better for India than other countries. I'm sure it's true in other countries too, but I think that is one story that I think is an interesting point of difference between India and China, at least.

Rob Stavins: Yeah, that is very interesting indeed. So look, thinking about India, I'm interested to know before we get to bring it up to date by talking about COP26 and Glasgow, putting that aside for the moment. I'm interested to know what is your view of the very structure of the Paris Agreement. I mean, it's a very different approach than we had with the Kyoto Protocol, obviously. What do you think of the structure? Does it make you optimistic that this can be a path forward for a number of years, or do you have concerns?

Navroz Dubash: So, the Paris Agreement when it was signed did make me optimistic. And I was in a relative minority in India at the time. Many people in India hold very closely, and to some extent as do I, to the idea that a certain legal principle, the principle of common but differentiated responsibility and respective capabilities, it's a mouthful, is core to climate politics. And it basically means, look, we are all in the same boat but some people probably played a larger role getting us to the situation and therefore perhaps need to step up first.

Navroz Dubash: And that those people are the developed world as opposed to the developing world. And that has been sort central principle that undercut, that under underlay, both the framework convention and the Kyoto Protocol. The Paris Agreement doesn't dissolve that by any means, but it softens it at the edges. It suggests that every decision doesn't have to be shot through with this clear distinction between developed and developing countries. So, that was a concern to many people in India. And we'll come back to why that concern may actually be realized.

Navroz Dubash: But I think the positive part of Paris for me was that it essentially recognized that progress on climate change is not going to come because of hectoring or peer pressure at the international level. It's going to come because national politics in country after country shift, where countries find ways of telling a story about how low carbon futures are good for them economically and can sell that politically to their own people. And Paris basically gave countries space
to figure out how to tell that story and make it happen. It's a learning by doing
dynamic, which I thought was very positive.

Rob Stavins: That's through the nationally determined contributions.

Navroz Dubash: That's right. So every country puts on the table nationally determined
contributions. They do it in ways that make sense in their national context. And
then they raise them every few years. Now, a lot of people think that that
raising of pledges will come from peer pressure. I personally think it comes from
setting in place processes domestically that allow countries to figure out ever
cheaper ways of decarbonizing and finding more and more ways of generating
non-climate benefits.

Navroz Dubash: In India's case, for example, lower air pollution. That also accompanies a lower
carbon future. Now, so that's the optimistic part of the story. If I could just
update that to Glasgow, what worried me a little bit in the buildup to Glasgow
and the predominance given to the 1.5 degree target was that in order to meet
1.5 or to keep 1.5 alive as the political narrative had it, required every country
to ramp up its ambition before it had fully tried to realize the ambition in had
put forward just a few years ago in Paris.

Navroz Dubash: And so the Paris machinery is designed as a learning by doing machinery. And if
you compress the timescale, then countries actually don't have a chance to shift
their national politics. And that worries me a little bit, because I see a tendency
turn to a story that says, look, we have a finite pie. We have to
scrape over
how to divide that pie instead of going home and saying, “how can we benefit at
home in ways that our populations will support as we transition to a low carbon
future?”

Rob Stavins: So truly, the Paris Agreement itself refers to the nationally determined
contributions being updated every five years, but by the early part of the second
week of COP26 in Glasgow, the leadership from the United Kingdom was
actually urging countries to come back one year from now in Egypt with an
updated NDC, which I would point out former Secretary Kerry, only two hours
after the adjournment said that the United States would not do. And I believe
the European union also said that it wouldn't do it one year from now. It's not
going to change its NDC.

Navroz Dubash: Absolutely. And I think that the risk is we are pulling on that Paris string, and it
really is at risk of unraveling because the question then becomes, as you said, if
the US and Europe deem their NDC sufficient, then what is to stop every country
also self-deeming their NDCs sufficient. And the underlying issue is that we do
not have a commonly agreed upon benchmark on how we judge whether an
NDC or a nationally determined contribution is either ambitious or equitable. Is
it ambitious as compared to a model that says, look, here's a least cost pathway.
There's no particularly reason why that should be a benchmark of ambition. If
you talk about what's equitable, how do you decide what is an equitable
allocation?
Rob Stavins: Right.

Navroz Dubash: Is it equal per capita emissions? Is it again, some sort of modeling scenario? Every country really can tell a different story and probably defend it reasonably adequately. And so if we get into a world where we are judging countries and each country is judging the other, it is going to distract from the underlying task of figuring out how to tell a story at home about how you do more. And I think that's where our efforts collectively should be.

Rob Stavins: So when I think about the Glasgow climate talks, one of the things that I remember was when I left at the end of each workday, I was confronted with the demonstrators outside. And so what I wanted to ask you about, Navroz, is this as sort of our final question, because we only have a couple of minutes left. And that is, is that something that we saw in 2019, on hiatus to some degree in 2020 because of the global pandemic, but back again in force in the year 2021 was a heightened degree of youth movements, of climate activism in Europe, in the United States, in many other parts of the world. So I'm interested in your personal reaction to these youth movements. I mean, when you see them, whether it's on television or in person, what's your reaction to them? Do you think that they're going to be major positive contributors or otherwise?

Navroz Dubash: Well, Rob, let's not forget I got my start here as an organizer of a civil society movement, right? The Climate Action Network. So I think that the motive bar for a lot of change lies with these youth movements. I think where we've seen progressive politics in many countries, it has been stimulated by these youth movements. But I want to pivot a little bit to also say that one of the things that came out of Glasgow is a great... and it worried me a great deal, is growing skepticism, including among the youth movements, but also among some of the developing countries, right? They were arguing for more finance to be on the table. The fact that the developed world failed to deliver its 100 billion dollar pledge, I think certainly rankles the fact that issues like loss and damage, very important to vulnerable countries, didn't get the sort of concrete outcomes that people were hoping for. And the fact that, that in a sense, I think where the youth movements have it right, is we are in a trap, I think, where we are asking countries to give ever more ambitious pledges often to the future.

Navroz Dubash: But it's easy to give an ambitious pledge in the future when the current crop of politicians isn't around to be held accountable. It's harder to say what you're going to do in the next five to 10 years. But it's the next five to 10 years that is going to determine our future. So if anything, I think we need more action across the world, including in the developed world. And I really hope that your president manages to push through the Build Back Better Bill, for example.

Navroz Dubash: I think it would give the US a lot more credibility, which I think it suffered from a little bit at Glasgow. I would love to see a lot more money on the table. I would have to see issues of vulnerable nations being put on the table. And I think some
of the youth activists are seeing the absence of progress on some of these issues and the pushing back of deadlines or rather the pushing back of pledges into the distant future. And that's unsettling. And I think they have a point.

Rob Stavins: So, that makes a lot of sense. Indeed, it's often surprised me that we find that over and over again there's so much attention to increasing the ambition of pledges for the future when current and historical pledges have not even been met. That's true of the current, of the original set of NDCs that came including from the European Union and the United States.

Rob Stavins: And here's all this talk about making them more ambitious and certainly also drew, as you were saying, Navroz, about finance. And yet that is what a lot of the attention is to. So alas, there's so much more we can talk about. You mentioned loss and damage, that'll have to be for a future conversation we have. Instead, let me just thank you, Navroz, very much for taking time to join us today.

Navroz Dubash: I've been delighted to be on this podcast, Rob. And it's always good to talk to you. Thank you so much for inviting me.

Rob Stavins: So, my guest today has been Navroz Dubash, professor at the Centre for Policy Research in New Delhi. 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.

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