

Ani Dasgupta on Moving from Promises to Progress

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Ariana Brocious: I'm Ariana Brocious.

Kousha Navidar: I'm Kousha Navidar.

Ariana Brocious: And this is Climate One.

Ariana Brocious: We know what needs to be done to ward off the worst impacts of global climate disruption: Curtail heat-trapping pollution; reverse deforestation; build resilient systems... But how we do those things is the trick.

Kousha Navidar: And we're in a race against time here. Emissions are still rising, and so are global temperatures. But on the other hand, the sooner we act, the more lives saved, the more jobs protected and the more futures secured. That said, honestly, in this moment, it's easy to feel like progress is extremely difficult.

Ariana Brocious: Yeah, I feel that too. But many big thinkers are still optimistic about our future. Realistic, but also optimistic.

Kousha Navidar: Right. Later in the show we'll hear my conversation with two of those big thinkers: Jonathan Foley of Project Drawdown and Nikhil Swaminathan of Grist.

Ariana Brocious: First, we've got my chat with Ani Dasgupta, president and CEO of WRI – the World Resources Institute. His book called "The New Global Possible" based on conversations he had with dozens and dozens of other climate leaders. And he's mapped out a path forward.

Ariana Brocious: We are now 10 years past the Paris Agreement. Global heat trapping pollution is

still increasing, and this is despite all the promises that countries have made in those 10 years to reign in their emissions. What are the biggest gaps between what the world agreed to do and what it's actually doing?

Ani Dasgupta: You know, Paris was a very big deal. I mean, it was incredible the Paris Agreement that 195 countries came together to sign this incredible commitment. And this is the 10th year. We all know that what we've signed up to do, we haven't been able to do in these 10 years, but I just want to make sure we all understand that doesn't diminish at all the incredible effort and, and outcome The Paris Agreement was. We haven't been able to do what we promised to do by then I think mostly because I think we thought we were signing a climate agreement.

Ariana Brocious: Hmm.

Ani Dasgupta: And it was about reducing the amount of carbon and atmosphere, amount of carbon. We didn't actually focus on the fact that climate or CO2 in their atmosphere is simply an outcome of the economy we have. So how we produce energy, how we move ourselves, how we build buildings, how we create fertilizer. All of this is based on fossil fuel. So what we signed up actually was signing up to an economic transition that we need a different kind of economy that does not produce carbon, that actually doesn't destroy nature while producing food, creates clean water and air, we can breathe. I don't think we were thinking like that. And because we were not thinking like that, we didn't really appreciate the enormous difficulty of achieving those outcomes. So I think if you ask me what we got right, we absolutely got right the ambition, ability for to get 195 countries together to sign anything. I mean, look at the world today.

Ariana Brocious: Yeah.

Ani Dasgupta: What we didn't get right is the definition of the problem and the enormous scale of the enterprise we were signing on to. So what has happened since then is neither government or businesses been able to do what they signed up to do, and there's been immense disappointment. Right. All of us, me included. But also there's been immense backlash in the last few years from the, mostly from the rich countries, United States, is the poster child of the backlash. But it's not just the United States. We should be all be disappointed about the backlash, but if anyone's paying attention, no one should be surprised.

Ariana Brocious: Backlash, you mean from the public?

Ani Dasgupta: Yeah. Political backlash.

Ariana Brocious: Widespread disappointment and, and backlash -

Ani Dasgupta: Not only disappointment, right now, there is active action being taken by political entities and businesses, which is working against saying climate change is not important.

Ariana Brocious: I mean, the Trump administration is erasing...

Ani Dasgupta: It is, but it is not the only one. I mean, look at what you, what is happening in EU right now. The green deal was such a promising thing, and they're now debating that how much to do.

Ariana Brocious: Right. I want to just to recap 'cause I think what you said there a moment ago summarizes so well this challenge, the moment we're in. I can think of successes that we've had globally, like ozone or even the Montreal protocol, which took forever to actually complete. But where we've, we've identified a problem, we've found a solution, and the countries of the world have

essentially, the majority have said, we're gonna fix it, and they have. And so that is similar to what kind of happened in the Paris Agreement, except that we didn't really grasp what we were committing to, which is why we have not accomplished it.

Ani Dasgupta: I think that's a very good example. The Montreal Protocol and the ozone layer, and in the book, the New Global Possible, actually the first chapter is all about multilateralism. And why was the Montreal Protocol successful and Kyoto wasn't? First of all, it was a different era of multilateral cooperation, but also there were very clear specific solutions. Change aerosols, like really very specific and that were implementable. But when you say, oh, you have this economy, you need to change the economy to something else, the scale of it and the complexity of it is different. That does not mean things are not happening. We should be disappointed on the level of progress, but I think the market has over-delivered on technological solutions we need for the transition, especially in energy. We did not expect where we are today on solar, wind technology or the prices, even batteries. Things we used to think are hard to abate sectors like steel, cement, glass. I mean, Sweden right now, there's a factory coming up on green steel that doesn't use fossil fuel.

Ariana Brocious: We just had that on our show.

Ani Dasgupta: Oh, you did? You talked to them.

Ariana Brocious: We talked about the project. Yeah.

Ani Dasgupta: Okay. That's a really good example of something we till recently, like two years back, labeled as a hard to abate sector. Like we could not find solution for 800 degrees centigrade heat, or more without fossil fuel. Sweden example. And there's not only one that is a very big. It's \$8 billion project, I think, um, is an example of what can be done. and there the interesting thing because I work with the people who are financing that 40% of the output is already paid for, meaning someone is willing to buy,

Ariana Brocious: It's been spoken for.

Ani Dasgupta: Yeah. And the fact, so someone is willing to buy premium steel because there's a market for it. So I'm just saying that we should not lose what is happening that is good in this discussion of disappointment. We should all be disappointed. But my, in my whole book, I argue, but if we get the right things in place, which is not on the technology. But actually the orchestration of change, bringing the different pieces together, there is very good example. There's 70 examples in the book with good things at scale is happening.

Ariana Brocious: Yeah. We've heard other guests say this, that we have more than, as you just said, the tools we need, we have, it's deploying them, it's doing it fast enough on the scale that we need. And so how do we overcome these obstacles that are slowing us down?

Ani Dasgupta: As I said, I think market is producing the technological solutions we need. I think we need many more technological solutions and I'm pretty confident in the right environment market we'll produce that. For example, in food systems, we need many more breakthroughs than there is energy system. We see fantastic breakthrough transportation. We see fantastic breakthrough happening. I think where we are failing is that we are focusing too much on technology and not enough on outcomes. Technology is a great sorting point. But technology itself doesn't produce good, good outcomes. To get to good outcome, we need to get people who will finance it, people who will regulate it. We need to find the land, people who will build it, train those people who will build it, users that will use the clean energy or the clean transportation. There's a ecosystem that needs to come together for a new solution. A classic example is, which is in the book, is in 2003 and four,

solar and wind become commercially viable. and for the next 15 years, we said to ourselves, you know, if you get the price right of solar and wind, because they're so good anywhere, they're such good technologies. You know, that would be it. We don't have to do anything else. Everyone will be doing it. Actually, the 2018-2019, price of solar and wind did become right today, 2025, 95% countries across the world creating a solar and wind project to produce electricity compared to a new fossil fuel is cheaper. Sometimes by far. You would think, okay, we have solved that problem. Why isn't everywhere there's only solar and wind. Solar and wind is only 12% of the global energy supply right now. Why not? Because the other pieces of these puzzle are not falling into place

It is not only enough to know what to do, we have to learn how to do it over and over again. and make sure that the outcome actually benefits people. Now, not 20 years from now only then we get durable solutions.

Ariana Brocious: Right.

Ani Dasgupta: and this is tricky, right? Some of the climate solutions are long term so it's tricky to do it both short term and the long term. One of my favorite example in the book is actually come. this is a story, you know, outside, uh, Nairobi. We, I met while writing this book, three women who run a, um, macadamia, not operation, uh, in which they work with about 10,000 farmers. And help them grow academia trees, help them when the trees are sick, but most importantly, they buy the nuts as soon as they are ready and pay them immediately.

Ariana Brocious: Hmm.

Ani Dasgupta: So already 10,000 families, 50,000 plus people are in cutting income regularly from this. Then they bring the nuts to a small factory outside Nairobi, where mostly women work and they process it and they sell it to, , Europe and United States. But the interesting part of the story. It's not only, it's creating employment and financial outcome for a group of people, but these trees are being grown in degraded land in Africa, more than half the land in Africa is degraded, so bringing land back to use is a huge issue. 55% of Africa population is connected to land, so these trees not only sequester carbon for 50 years, they live about 50 years, but those roots bring back water underground and make this land usable again for many different purposes. And so not only we are in this particular case, uh, providing income and support right now, but we are actually creating carbon and, regeneration land for the long term.

Ariana Brocious: Stories like that are really inspiring and hope giving. And they kind of remind us that there's a lot possible on a really small scale, on a local scale and by integrating a lot of these challenges as one, you know, employing people, fair labor, adequate wages, , carbon sequestration, all these things. However, those kinds of projects are not likely to address the really fundamental root of the problem, which is the continued emissions that are heating the atmosphere and the bulk of those emissions. 80%, I think, have been attributed to 57 companies in the last few decades. Let's talk for a minute about regulation, about ways that you can really get those companies to change their behavior in a meaningful way.

Ani Dasgupta: I believe, and we at all of the, all of us believe that without companies doing things differently. It's impossible to get to our goal of 1.5 or whatever goal we might have of a better planet, simply because out of a hundred trillion plus economy that we have to in the world, about 70, 75 trillion is businesses. So whatever decisions businesses make matters a lot to whatever path we're gonna take. And I have a whole chapter in the book about businesses, and the title of the chapter is Limit to Voluntary Action. So since Paris 10,000 plus companies have signed up to net zero goals, and a lot of them have done a lot of good things, but they've also discovered how hard it is to actually get to real decarbonization of their businesses without changing their business plans

like a business operation.

Ariana Brocious: Maybe sacrificing some profit.

Ani Dasgupta: sacrificing profit or finding different ways to make profit.

Ariana Brocious: Yeah,

Ani Dasgupta: businesses I think in the long term won't exist. If they didn't make profit. They'll become NGO, like mine. Businesses by definition is there to make profit. But the question is how much and question is under what circumstances? And they are a really good example. Not enough, of businesses that are actually making profit while decarbonizing. IKEA is a very good example. Since 2015, they grew by 30% and they've reduced their carbon rate by 20 in real terms.

Ariana Brocious: Mm-hmm.

Ani Dasgupta: Right. So the, they're not enough examples of like that, but that example, and IKEA is not a, like, it's a boutique company. It's a large company with a multinational present. Yeah. And, and, and most importantly, a multi-country value chain. They buy things from, from Indonesia to Romania to wherever, like everywhere. So. It's not easy for them to do what they've done. What I'm saying is they have done it and shown that it can be done. But then there are companies like PepsiCo that are trying to think, okay, if we did not actually sell flavored water and just sold the formula or the powder, what would it look like? What would our business model be I had a very interesting meeting with Lego who are very keen to decarbonize. It's a really interesting story and I met with the board and they're, uh, there's a great company. Very serious yet. They could not find yet a plastic that is not made from fossil fuel or a derivative of fossil fuel that is durable for 25 years because their goal is to make toys or bricks that are durable for many, many years. And they really asked me a really interesting question. They said, look, we can't find this. And we are trying. We are trying everything. Yet we get no credit for making something that is 25 years, lives for 25 years because most toy makers make things that are year is ma, or two years is maximum.

Ariana Brocious: Yeah.

Ani Dasgupta: So these are companies that are really thinking about, and these are just two examples. There are thousands of companies across the world without business model reinvention. It is very hard to just decarbonize.

Ariana Brocious: Well, so you've made this point that voluntary action simply is not enough. Even companies that have set their own ambitious targets and are trying, it's difficult. So what is the policy framework or the policy landscape you think we need? Is it, is it carbon-based? Is it measuring emissions? Like what, What are the teeth we need to try to actually motivate companies beyond voluntary commitments?

Ani Dasgupta: The first thing we need is, you know, these are societal choices we have to make, how we want to live, and what we want to value, what we want to price, and what we don't want to price. Right now we don't price most of our emissions, right? I mean, that's why we have the outcome we have. I argue very much this is a societal choice. This is a political choice you have to make. And, and that is a fundamental thing that most countries have to decide. What is it that, is it okay for X number of people dying because of pollution every year, or it's not okay? And the evidence couldn't be clearer. I mean evidence of connection in fossil fuel use and death in most countries for air pollution. It couldn't be clearer right now. So I just want to highlight before we get into details of whether it's carbon accounting or some other accounting, it's a set of choices every

society has to make, how we want to live and what we want to price.

So if a society decided we actually don't want to encourage production of carbon. We want companies to figure out how else they can produce the outcome they want without production or destroying nature. I think both should be part of it. And so there is a policy framework we need that is missing before we get to the actual solution and there are many solutions, carbon taxes is one. Ultimately what you want is a set of rules that disincentivizes production of carbon dioxide in the atmosphere, destruction of nature or polluting water. All those things, not just one thing and encourages people who are trying to find other solutions and, and accept the fact it'll be a transition. It won't be that one day we will switch off and switch on. If we did these three things, we will find a solution. Every country will find a different solution somewhere. I mean, China, they have done internal carbon markets. Somewhere it's something else. In United States, a carbon market seems to be a very difficult thing to achieve, though a lot of people have been talking about for a long time. So I actually don't think there's one solution, but I do think there's a societal choice to be made and I must say that our political leadership in all these countries are not actually articulating the choice we have. Even if you look at Biden administration, who I think was the greatest in doing climate level policies, but all of it was about incentives.

Ariana Brocious: Right.

Ani Dasgupta: They were, as you know, there was no disincentive.

Ariana Brocious: That's also what was sort of politically possible.

Ani Dasgupta: That's what we thought. Because you see what has happened since. That's what we thought. That's what we thought was durable, right? That's what we thought. Incentives.

Ariana Brocious: No, I know. And they have have not proven durable at all.

Ani Dasgupta: No. I mean that's what we thought. Like if incentive, you put incentive rather disincentive, we won't do away with incentives. That was the theory of change.

Ariana Brocious: But regulations were, would not have proven any more durable, I think, with this administration,

Ani Dasgupta: That may be true, that may be true. But I, what I'm saying is we still have to focus our attention to choices we face. And the outcome. Even last year, Ariana, just last year, we had \$300 billion of loss from climate related incidences. Just loss, physical loss, not death or discomfort or lost jobs, just physical loss. So if you add the others up, most probably will be double. That is the scale of what's happening right now. So, we have to kind of talk about what is the cost of inaction versus cost of action. And every study in the world, every study in the world have shown the cost of action is still far cheaper than the cost of inaction.

Ariana Brocious: Coming up, it's easy to think of the annual UN climate conference as being led by the richest and most powerful nations. But Ani Dasgupta says that's not what really happens:

Ani Dasgupta: Where leadership will come from is unpredictable. It's not just the biggest country, the loudest voice that will move people. It can come from any corner, and we should be encouraging it coming from any corner.

Ariana Brocious: That's up next, when Climate One continues.

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Ariana Brocious: This is Climate One. I'm Ariana Brocious. We're going to return to my conversation with Ani Dasgupta, president and CEO of WRI, the World Resources Institute. In his book, "The New Global Possible," Dasgupta stresses the powerful role of multilateralism in making climate progress. Every year the United Nations holds an international climate summit known as the COP – the "Conference of parties."

Next month, COP 30 will take place in Brazil. Dasgupta describes the COP process as quote, "disappointing, dysfunctional, and even maddening at times, yet essential." I asked him to unpack that seeming contradiction.

Ani Dasgupta: Lemme start with the essential part. 'cause a lot of people have spent a lot of time talking about how disappointing it is. And it is disappointing simply because we haven't made the progress we, we should have made by now. But my view is that even if we did not have the COP process today, we would reinvent something that looks pretty much like that. And the most important reason for that is that it's the only place where every country comes together to discuss climate. Climate has no political borders, and there is no way to solve climate without actually doing it together. Even United States that actually who stepped out of the Paris Agreement and from the treaty, even if it isn't part of COP, their citizens will suffer from climate related disaster because you can't control by one country, right? I mean, that is pretty obvious. But the other thing is very important. Ariana, that COP is a process that even the smallest country has a voice. It's a process that is not ruled just by the big countries or the large countries, or economically more powerful country. There's a very good story in the first chapter of the book about multilateralism, where it talks about how Marshall Island, a relatively small country in the middle of the ocean, changed the course of the Paris outcome. Just one country and a leader from one country, uh, and tells a story about why that happened. But there are a lot of things that I think needs to be improved in the COP process. One, I think a decision making process has to be improved. Right now there's a decision making process that is unanimous, which allows any one country doesn't like something to stop a whole process. And has happened over and over again.

Ariana Brocious: When you have 195 countries, that's, that's –

Ani Dasgupta: Yeah. So that's why Paris Agreement is so incredible. I think there could be a process when everyone has a voice, not a veto. And there needs to be more accountability. UN finds it very hard to shame any country for an action because it's an association of countries. So finger pointing is not their style, but that's why organization like ours exists that finger pointing we are, we are not afraid to say who's doing what or not doing what, but accountability needs to be absolutely part of the discussion, which is not yet the case. And the third, is that I think the future of COP will be mostly about finance.

Ariana Brocious: And let's unpack what finance means.

Ani Dasgupta: So finance means all countries need to transition. But the countries and globe, which are poorer countries. Sometimes called global south, sometimes called emerging economies, whatever your choice of this is basically countries that are not the richest countries. Which is 50 countries in the world. All the rest of the countries. For them to transition. They do not have enough finance to finance it internally. if you want them to transition in speed, that the world needs them to transition, they need to. Find finance from outside the country. That's the fundamental issue, that there's not enough finance, and if you don't do that, these countries will not transition.

Ariana Brocious: Essentially rich countries need to help poorer countries pay to adapt to climate, and that is distinct from paying them for the losses and damage that they are already suffering.

Ani Dasgupta: These are two connected with different things, and I would not use the word help. Rich countries will be helping themselves.

Ariana Brocious: Hmm.

Ani Dasgupta: Think about this for a minute. There are only 12 countries in the world that make up the large middle-income country. You know, China, Indonesia, India, South Africa, Brazil, Mexico, Colombia, Kenya, Ethiopia, Nigeria. You know, these are the large middle-income countries. These countries actually have the world's most people in it, most poor people in it will produce by far the most carbon, more than 50% of world's carbon from now till 2050. Because they're growing and they're growing very exponentially. And if these countries did not transition, the world has no chance of transitioning. And that is very important to understand that it is, you don't need to help Sweden transition. Sweden has enough money to transition and it's a political question whether they will transition how fast, but if the world in transition, whether Sweden transition or not, doesn't matter, the world's ice cap will melt.

Ariana Brocious: Right.

Ani Dasgupta: Right, so we are helping each other here I mean, people estimate that about 2.5 trillion or something is needed from now till 20 by 2035. For this transition, more than half of it will come from domestic resources, but about 1.3 trillion needs to come from outside the country. This was the big discussion Baku last year, where rich countries came together and said, okay, we will provide \$300 billion of this \$1.3 trillion. And they didn't say how that, we will figure out how to get you to \$1.3 trillion. So one of the discussion that will take place in Brazil, how do we get to \$1.3 trillion? And a lot of the \$1.3 trillion will be private capital

Ariana Brocious: Oh,

Ani Dasgupta: be because there's not enough public capital in the world

Ariana Brocious: so not

Ani Dasgupta: even to get the th.

Ariana Brocious: but, but private investors or

Ani Dasgupta: Privacy, not governments. 'cause even the governments, as you know, development finance, which is the money the governments give to other, including the World Banks and Nation Development Bank, that's actually diminishing as a total. So though they promised \$300 billion by 20, um, 35, let's hope. They didn't say how they'll do it. Let's hope they get there. There's still \$1 trillion left to get to, , and there could be other things you can do to include the public capital, like international private capital, but we believe about 700 to \$800 billion would be needed from private capital

Ariana Brocious: Wow.

Ani Dasgupta: to these countries.

And there is, out of the old private capital in the world, only 3% is flowing to this country zone. So there's a huge gap. So a lot of the discussion you will see on finance will be all about. How finance

can flow, private capital can flow to these large middle income countries or poor, even poorer countries than middle income countries.

And I must say the Brazilian leadership or the COP leadership has done a very good job of bringing this discussion to the G 20, which they chaired because these issues of finance really can't be solved by the environment ministers who normally come to COP. It really needs to be solved by the economic minister of the richer countries because it involves banks. It's the banking regulation World Bank, and I think the Brazilian leadership has done a very good job on bringing that together. We believe. The financial system has to really has to work as a system to make this financing a priority to getting the transition finance in place. We need to see much more finance ministers in cops, and we have seen historically

Ariana Brocious: You state that addressing justice isn't a choice, but an imperative in solving the climate crisis. And even in the discussion around COP, which is this really amazing equal voice participation, there are still power imbalances just based on which countries can afford to go, how many people they can afford to send, et cetera. So how can the climate movement move beyond simply recognizing injustices to actively addressing them?

Ani Dasgupta: First of all, I think we should recognize the climate injustice and which is, I has been the point is injustice not just across countries, which is what the COP, a lot of the COP discussions between rich and less rich countries. I think there's immense injustice inside countries.

Ariana Brocious: Hmm.

Ani Dasgupta: The impact of climate change is actually scarcity of resources, scarcity of clean water, scarcity of land. You can build a house on, or, or, or farm clear city of clean air. And when scarcity takes place in any country, any country in the world, the poor are the worst affected. So climate change in a country actually disproportionately impacts the vulnerable. You and I will not, most probably would not suffer from climate change because we would have resources to buy air conditioner if our basements gets flooded. We would have resources to find a plumber or even move if the place got too hot. But that is not true for most. So I don't think we should underestimate the justice within countries, though in the COP format, we always talk about lack of justice across countries. What we can do, what we have all done and what we do. WRI has done over and over again is actually create forums for smaller and more vulnerable countries that we bring their negotiators together, we find what their common voice is and bring that. AOIS is a great example. So if you see cops now, AOSIS.

Ariana Brocious: Which is-

Ani Dasgupta: is a small island, small island state association, gets its very significant voice. The group of 77, which is the group of African and, relatively less rich countries, they get very significant voice, So the way to press this forward is to actually create platform for, I like the examples I just mentioned that unifies voice and create a collective voice to expression. But I also want to remind you that in the COP process, what has been striking has been incredible leadership. Like whenever in Sharm El Sheikh, the leadership of the Pakistani Environment minister and her own voice, her country was just suffering from this \$30 billion flood

Ariana Brocious: Oh, it was a tremendous flood. Yeah.

Ani Dasgupta: Yeah, tremendous. Right? And, and how she got everyone emotionally attached to the loss and damage thing by vividly portraying what was happening to her country. So, what I'm saying is both. Both things are important. Common platforms are important, but visceral leadership,

like we saw from Marshall Island in Paris are also important. One of the things I write in the book is where leadership will come from is unpredictable. It's not just the biggest country, the loudest voice that will move people. It can come from any corner, and we should be encouraging it coming from any corner.

Ariana Brocious: Yeah. throughout your book, you talk about the need for focus and for optimism. You also discuss the essential role of institutions, and to be frank, in the US right now, we're seeing the erosion, destruction, erasure of many of our essential institutions. As well as a lack of optimism and focus. So what is your advice for all of us in this current moment? We talk about the importance of climate and justice and addressing these things, and it can feel hard right now.

Ani Dasgupta: It is a hard moment. It is a hard moment. If I may address your question, which is a very good one, in two steps. One is about optimism and the second about focus, though they're connected. I think it is a hard moment for United States, especially, I live in DC. Hard moment, in many different ways at the kind of work I do or you do. But I also think we should take it in perspective, and two kind of perspective. One is United States is one country out of nearly 200 countries in the world. And what we are experiencing here is really an outlier. Even the backlashes are taking place in other European countries are nothing similar to what's happening to United States. So that's, I'm not saying we should take any solace from that, but at least put it a perspective that what is happening. I think we will make progress even in the United States right now, even in the next few years to what states and cities do. Not as much progress as we could have made. But we will make progress. I also think we'll make progress because at least the energy systems, common sense will prevail in energy system because the energy system demand increase will force us to actually find any and all solution to energy, which will include at a large scale renewable energy. So that should not give us a lot of comfort.

It should give us some like little comfort that, you know, things will go forward. But the other thing, is that what is happening in the United States and richer country is very different. And I just want to make sure your listeners really, really absorb. This is very different from what's happening politically and policy wise in most of the large middle income countries that I talk about as, and they are critical. Why is that? Because, you know, fossil fuel is very concentrated in the world. It's only in three regions of the world, Northern America, which United States is very much part of Middle East and Russia. So the rest of the world really doesn't have long-term deposits of easily available fossil fuels. And the countries I just mentioned, all the 14 countries except Nigeria has very little of anything except coal and not very high quality coal. So, and, and all these countries have discovered or realized a coal is really not the future. It can be a transition field, they'll burn it. It is not the future in inexpensive whatever. So if you look at their policies. That they are gung ho they are figuring out how to do more renewable, not because I, I'm hoping they care about climate. I think some of them do. But what they really care about is energy security. And that's what they, and they have abundant of these two energy sources and they were so, I know it sounds very dark sometimes sitting here. But we work across 50 countries across the world. The world is not exactly where we are here. So that's the first point I'm gonna make the second point on your focus. Did you see few years back this movie called Everything Everywhere All at Once?

Ariana Brocious: I know of it. Yeah.

Ani Dasgupta: I thought it was a great movie. Anyway, I write in the book that our current policies, global policy, it's like that movie, everything everywhere, all at once. And I absolutely think we don't have resources or time to do everything everywhere else at once. We actually have to focus, and the focus is the most difficult currency right now, it seems to me. And we have to focus in two ways, focus in the countries that are exponentially needed for change. I personally think is the large middle-income countries. These countries have the most difficult existential challenge, which is how

to grow the economy and reduce carbon at the same time.

Ariana Brocious: Mm-hmm.

Ani Dasgupta: All of us should be working to figure out that answer. Because if we figured out that answer and I think the answer does exist, then we would even smaller countries would help from it. And also richer. But at the same time, there are certain systems we need to change that has exponential domino effect, which I think are the energy systems, the food system, and cities that if these three system be focused on not, these aren't the only systems in the world. But they have the chance to change as a across the board, other things that allow us to get to a lower carbon nature positive and jobs in a much faster way. So I feel focus as a strategy is a critical piece. And this is the last chapter of the book where I talk about what could we do with this If we got technology right and orchestration right, what would we do? We should focus on few countries with the right systems and we will have a chance better than others,

Ariana Brocious: Hmm. All right, we'll leave it there for now. Ani Dasgupta is president and CEO of the World Resources Institute and author of the book, the New Global Possible. Thank you so much for joining us on Climate One.

Ani Dasgupta: Ariana, thank you so much for having me, and thank you for interest in the book.

Kousha Navidar: Coming up, reigning in climate pollution may be easier than many people think:

Jonathan Foley: I often say like, you know, stopping climate change is at least one third stop doing stupid stuff. You know, 40% of the food on this planet is never eaten. That's absurd.

Kousha Navidar: That's up next, when Climate One continues.

Kousha Navidar: This is Climate One. I'm Kousha Navidar. During SF Climate Week in April, I got to sit down with two big climate thinkers: Jonathan Foley, executive director of Project Drawdown, and Nikhil Swaminathan, CEO of Grist, a nonprofit online newsroom covering climate, energy and environmental justice. We talked in front of a live audience at the Commonwealth Club in San Francisco about how climate solutions are moving forward - even in the US - despite the active undermining of federal support for climate work. First, Jonathan Foley.

Jonathan Foley: The good news about climate solutions is that we have so many, that we have everything we need by the way, right now already to solve climate change. We don't need to invent anything new to actually stop this problem. It would help to invent some new things to make them cheaper, faster, better. That's great. But we do have what we need. So our choice is that: it's still a choice about the future. Do we want to have a lot of climate change or do we not? That choice has not been taken away from us at all, So I'm excited about that, first of all. But most of all, I'm excited by the kinda low tech solutions that offer a lot of other benefits. sure we could end up, you know, addressing climate change, but the great news about addressing climate change is we also build a better world in the process. That's kind of awesome, isn't it? Imagine going to the doctor and they're like, wow, you're really sick and I'm gonna give you this medicine, but, and its side effects are, you're gonna feel better. it. You're gonna feel better. You're gonna be.

Nikhil Swaminathan: grow six inches.

Jonathan Foley: you're gonna, yeah. You'll feel better. You'll be taller, you're gonna be better looking. You're gonna have more money in your wallet. I mean, they're like, wow, this is great. Yeah. You know? So climate solutions are like that. And, um. So I like the kinda low tech solutions that like, hey, this saves money, this cleans the air. This creates jobs. These are incredible things. But I

think we're focused a lot on a couple of sectors. We focus so much on electricity because I think people understand plugging something in at the end of a wire is either a coal or a solar panel. Okay, that's understandable, but that's only a quarter of climate change. The things that keep me up at night about climate change are actually other sectors like food. Food contributes a third of our greenhouse gas emissions, but it only gets 3% of our climate funding and a lot less climate reporting except at Grist and Climate One, you guys do it well, but a lot of places don't even mention it. So we gotta think about that. We also have to think about industry. There are a whole bunch of things that we don't know how to solve yet exactly in like cement, steel, landfills, wastewater treatment. Those won't be solved with a solar panel in EV or a heat pump. So there's some sectors that are doing really well, some others that need more attention, and I'm excited about some of those solutions. And finally I'm really excited about, what I like to call the emergency break climate solutions, the ones that are especially fast because we're kind of falling behind the pace we need to, you know, be doing to avoid really bad climate change. But we could catch up if we focused on the fastest solutions, things to deal with methane in particular, 'cause methane's a fast acting greenhouse gas, but also things that deal with deforestation because deforestation emits all of its carbon at once. When you prevent deforestation, all of the benefit of stopping deforestation happens on day one. A solar panel, you gotta wait 30 years for it to give you all of its, you know, impact. But on deforestation, you get it all today. So these kind of emergency brakes, if we pull those really hard things like methane, refrigerants, black carbon, deforestation, those kind of solutions, those might be able to kind of steer us back on track by catching up a little bit, and we need to put a lot more money and attention on those solutions.

Kousha Navidar: I'm hearing like low tech, I'm hearing the right industry at the right pace. The emergency brake that you're talking about, I'm sure there are big promises that are made in, in the right, I'm thinking like carbon capture, for instance. How, how, how much does it actually work? But there's a lot of support in it. You must look at different proposals, different ideas, all the time. At Project Drawdown how do you kind of differentiate between. Greenwashing I guess I would call it. And things that actually hold promise.

Jonathan Foley: Well, we've tried to be very, very careful 'cause we are a science-based neutral, non-partisan, non-commercial. You know, we're trying to be the Consumer Reports for climate change. Cause you know, we're talking about a multi-trillion dollar problem. Maybe we ought to know what we're doing. Might be, might be helpful to know what works and what doesn't, right? And so we look really carefully at the evidence, uh, not just our studies. We look at everybody's studies. We synthesize every paper ever written in science, engineering, technical, economic literature, all the data, and bring it together and say, Hey, does this actually work? And if so, how much would it cost? And how long would we have to wait for it? And when you crunch the numbers, you just find some stuff, just doesn't work. Most of the carbon capture schemes being proposed, at least the industrial carbon capture schemes, just one, they defy like laws of thermodynamics, they just don't work at all. Or they're like a fig leaf for oil companies basically. 'Cause they're, you know, the carbon, whatever carbon they capture actually is used to pump more oil and gas out of the ground. And so these things just are crazy. Most of the time when you look at them with a few exceptions, there might be a few ideas that could work pretty well, but mostly not.

Kousha Navidar: Yeah.

Jonathan Foley: And we also see a lot of other kind of high tech shiny objects being thrown our way. Especially, you know, in places like San Francisco with a big kind of tech community. You know, the tech bros are great sometimes, but it'd be helpful if you kind of stopped and learned the science about what you're doing instead of just pitching something you don't know much about. And so, could we really, uh, I hear a little quiet applause out there. Yeah.

Kousha Navidar: I hear snaps.

Jonathan Foley: Yeah. Yeah. But, um. Now we need new technologies, , sometimes of course, and better technologies that make things practical and more affordable and more equitable. That's great. But the worst possible thing to do is wait for some future tech solution that isn't going to arrive. A friend of mine once said, you know, if your house is on fire, you grab the hose. You don't talk about, let's disrupt the fire suppression business. You know, like. No. Grab the bloody hose, you know, and if new technologies come along in the future years, great, we'll put them in the toolbox. But in the meantime, we have to get going and waiting is the worst possible thing to do.

Kousha Navidar: Nikhil. Uh, when John said the fire hose metaphor heard you go. Yeah. What, what did that bring up for you?

Nikhil Swaminathan: I think that there's a lot of conversation around technological solutions, and I, it doesn't surprise me that if you spend any amount of time with an IPCC report, you kind of come out of it being like, we need it all. Like everything. That's kind of true, but you also have to use the tools that are available to you right now and I think John just like mentions a lot of smart ones, like, look. Methane in the short term, is so much more potent of a greenhouse gas than carbon dioxide. You plug abandoned oil wells, you figure out ways to, to give industry what they need to make sure that natural gas isn't leaking through natural gas pipelines. You address food waste. There's this whole suite of phases that we have to go through that I think as a society, we haven't even sort of taken the first step collectively, I remember I used to live here in Oakland and we had curbside composting, and now I live in Atlanta, Georgia. And I'm like, what do I do with all this? You know, I have two children. They generate intense amounts of food waste, like just. And I eat some of it, but like can't

Kousha Navidar: while

Nikhil Swaminathan: eat all, all of it, um,

Kousha Navidar: out of the garbage or

Nikhil Swaminathan: No, no, no. Whatever. They leave on their plates. So, you know, we, we pay extra for a composting solution. Like, that's, that's so low hanging fruit. It's like, it is the lowest of the low hanging fruit in terms of like what we as a society could be working towards. Like who? Who out there is against taking food out of a household or a restaurant that's not used and giving it to people who need it or composting it like that feels totally apolitical to me. So why can't we at least get out of the door with that? And then we can worry about carbon capture and direct air capture and all that stuff later. There's just so much in front of us,

Jonathan Foley: You're absolutely right. I mean, there's so many missed opportunities. That are like, kind of duh, you know, and I, I, I often say like, you know, stopping climate change is at least one third stop doing stupid stuff. You know, like 40% of the food on this planet is never eaten. That's absurd. You know, and we can compost some of it better yet prevent it in the first place. I think we can agree on that. Or like, you know, can we insulate the attics of, um, senior citizens in America to help them reduce their energy bills or something? You know, just stop being so wasteful on energy, materials, food, land, et cetera. Like, can we agree on that maybe? and I think the answer is actually yes. And, uh, you know, there's just so many kind of duh things and they're all just waiting for us. But we haven't actually been very strategic about climate solutions. We've been smearing peanut butter on toast evenly. We're not really designing climate solutions to the local level. Like what would be the most appropriate things to do in Atlanta versus Oakland? It turns out it's a very different mix of things. So how do we kind of bring it home to the local level where actually most

stuff actually really happens instead of circling the beltway all the time and pretending that's where all the action's happening too.

Nikhil Swaminathan: I'll give like one other example, which I think has kind of cut through our current political sadness. And that's like, there's a, the burgeoning right to repair movement, and the ability for people to make their electronic devices last one year longer, two years longer. like the waste from those contributes to climate change and being able to hang on to them for a little bit longer. Fix it. Try to fix it yourself. . Is it's powerful and like, you know, Ohio is taking it up now. People want to save that money anyway, they don't wanna buy another a thousand dollars iPhone. So like these right to repair movements are really important. Like, why don't we have a right to repair movement for food waste? Why don't we have it for, you know. Deforestation. Like all of these first order solutions, like, let's, let's do them and just like get going. and I don't feel like they have to be necessarily tied to climate change. Right. To repair can be like your right to not have to give in to planned obsolescence, you know? Yeah.

Kousha Navidar: Well, I, I was gonna say, I, I, I also hear, this like, localized approach, which I think everyone could agree on. So my, my next question is what's getting in the way then, and this is for, for both of you. What's getting in the way of putting

Nikhil Swaminathan: I,

Kousha Navidar: things? Yeah, Nikhil, go

Nikhil Swaminathan: I actually think,

Kousha Navidar: think,

Nikhil Swaminathan: I mean, we are in the middle of this conversation in a different context. Right now, global versus local globalization is evil. It took away. The jobs in this locality, ipso facto tariffs.

Kousha Navidar: Mm.

Nikhil Swaminathan: And it's a similar kind of conversation around climate change. There's a macro and there's a micro, and the macro is, there's too much carbon in the atmosphere. And the micro is, I live in Kentucky and it floods every two years, like. Biblical Biblically floods and that didn't use to happen. I live in California. There are wildfires. I live in Georgia. There are extreme heat days, you know. It looks different everywhere. The solutions are a little different everywhere. And if you make it a local issue, then it's about jobs in your economy. It's about lowering your electricity bills. It's about creating freedom. Guess what? you put solar panels on your roof. You get to, you know, kind of thumb your nose at your utility. here's just all, all these ways of talking about how you can improve a local economy that are climate forward, but if you spend too much time talking about it as a global issue, then there are other people who can step in and solve

Jonathan Foley: Well, yeah, I mean, uh, I was just thinking of an example. We talked about backstage a little bit. Um, so I used to live in San Francisco for about six years and then I moved to, uh, back to Minnesota where I lived before. And then I ended up moving to a, a very rural part of Minnesota, which overwhelmingly voted for Donald Trump and is full of Republicans. And my San Francisco friends just couldn't believe it. They're like, oh my God, how can you live there? How could you, how do you talk about climate change where you live now in that deep red county? I'm like, actually it's a hell of a lot easier than it was in San Francisco because here people were all kind of posing and being kind of signaling each other about how virtuous they were about climate change, but not actually doing as much sometimes. Sorry. But you know, talk is one thing, but walking the

walk is the other. But where I lived later, I didn't lead with climate change. But people would often ask, so, Hey, what do you do for a living? I'm like, well, I, uh, try to work on things that help communities be thriving, uh, how to create jobs and how to lower the cost of living and how to create more thriving communities in addressing the climate problem we have around the world. And to make sure places like our part of Minnesota are competitive in the global economy moving forward. And then we move forward at a 21st century economy. And people look at me like, yeah, yeah. You know, I'm, I'm really interested in that. Tell me more. And you know, these are people who probably wouldn't vote the same way as I do, but they certainly wanted to hear about jobs. They wanted to hear about stronger communities. 'cause we're watching rural America feel left behind and die in the vine. That's why people are so angry. You talk about opportunity, you talk about jobs, you bring it down to the kitchen table. They're right there with you. and look at where most of the renewable energy projects are.

Look at where funding for clean energy goes in this country. It's red counties in red states, because that's where the sun is, that's where the power lines are. That's where the geothermal will be. That's where the wind is. And so I think we don't have to have this, you know, Washington dominated, UN dominated conversation of left versus right. That's a media invention in the real world. You get down to the kitchen table, people don't actually talk like that. They care about their communities, they care about their kids. And if you meet them where they are and talk about these issues in a respectful way and listen, you find you can have a great conversation and move forward at the local level.

Kousha Navidar: I hear so clearly this emphasis on local, on meeting people where they are. There's nuance to solutions too. mining for instance, lithium cobalt linked to human rights violations simultaneously seems like it's necessary for us to mine those, , essential items in order to get off of fossil fuels eventually. So what do you make of that? How do you, how do you balance the, the good? Because, you know, you talk about. This prescription drug that'll make you grow to six feet, which would be great for me. And then you're able to like, you know, dunk on everybody at basketball. There are side effects to it. Right?

Jonathan Foley: Yeah. Well that's one that's brought up a lot is the challenges of batteries. like cobalt to lithium, these other materials that things like batteries are made out of that, you know? Yes, we absolutely need to address the kind of human rights and environmental issues related to mining these materials. Absolutely no question about this. This, by the way, is a very solvable problem. You know, a billion dollars or so would solve it, period. Nothing will solve the fossil fuel problem. So compare one where you know, we have untold mitigatable damage forever versus a problem we could solve if we aren't so damn greedy. And by the way, cobalt is primarily used in fossil fuel mining. Not in our batteries. You know, that's, that's a little why the fossil fuel industry doesn't want you to hear about, but it turns out that most of the cobalt isn't used in your batteries.

And also, we didn't invent batteries to solve the climate problem. Look at your phones, look at your laptops. They've been around a long time. So we have a real problem here, and fossil fuels aren't just contributing to climate change. The air pollution associated with fossil fuels alongside CO2, but the, you know, the particulate matter, the soot and the smog that are produced by burning fossil fuels contributes to about eight or 9 million deaths every single year. So fossil fuels are estimated to kill eight to 9 million people a year on this planet. That's more than all the tobacco deaths, gun deaths, and warfare deaths. Combined. So let's compare that versus mining. Now, mining is dirty. It's messy. It's horrible the way we do it right now, only because we're greedy. So let's solve that. And we shouldn't shy away from that. We should not ignore that, but we can solve that if we put a little bit of money and some better regulations around this, and also some good engineering. We also only have to mine those once. They will never have to be mined again. But coal and oil and gas, you keep on mining, you keep on dying.

Kousha Navidar: Nikhil, I wanna get your perspective on that because reporting on these solutions I'm sure requires a lot of nuance. I mean, I'm thinking of unearthed the mining issue from Grist, A series that that looks at exactly kind of what John is discussing. How do you make sense of that dilemma in reporting?

Nikhil Swaminathan: I think what was important about the mining issue, and I think what's important about all solutions reporting is that you have to understand that every decision that you make is a trade off decision. And these are the realities of the minerals and we might as well deal with them. and hopefully in the way that John talked about like safer mining, you know, recycling them more actively. Similarly, you know, the ref main refrigerant in heat pumps is actually much like methane, in the short term, a really intense greenhouse gas, so.

Kousha Navidar: Mm-hmm. So,

Nikhil Swaminathan: Yes, it's like overall more efficient. You know, we're using less electricity, et cetera, et cetera, but we have to fix the refrigerant too. And solar panel waste is an issue and so we have to deal with that. And there are issues around wind turbines. So like anytime you're talking about this,

Kousha Navidar: mm-hmm.

Nikhil Swaminathan: you have to be honest about what the trade off is. I mean, induction stoves are awesome. I have one at home, I can, you know, boil water in 90 seconds or less. That trick never gets old. Guess what? You wanna make something in a wok on your induction stove?

Kousha Navidar: Tough.

Nikhil Swaminathan: you don't get that char that you get from gas. that's a reality. It's a trade off for me. I don't care. I can't use a walk anyway, you know. So

Kousha Navidar: you're eating your kids' leftovers...

Nikhil Swaminathan: like I'm eating, you know, a half eaten peanut butter sandwiches. So like

Kousha Navidar: Yeah.

Jonathan Foley: there's a joke about a walking the wok here.

Kousha Navidar: Oh, nice. You heard it on Climate one! Puns galore. In like the five minutes we got left. I wanna make sure that we touch on this moment too, 'cause I'm sure what's going on is on everyone's minds. And, and so, John, for you. The federal government is pulling back in all different kinds of ways. Uh, we're looking at what the path forward is. When we talked earlier, you had a wonderful metaphor that I'll let you explain if you'd like, but this idea of a chess board and where you look at the pieces, can you just talk a little bit about what pieces you think we can put into play now? How you think about that?

Jonathan Foley: Yeah. well, lemme back up a little bit. For the last 30 years or so, at least the narrative, I've heard a lot about climate change and the environment is, gosh, if we just vote for the right guys on election day, they'll be enlightened and virtuous and good, and they will do the right thing and then they'll send the right representatives to the UN and then they'll hold hands and save the world. And I'm like, well, how did that work out for us? isn't that the definition of insanity? Just keep repeating the same thing and expecting a different result. So for three, four decades we've been kind of hoping this kind of political class of enlightened people will save us. It hasn't worked

out especially well. So I'm getting to look, uh, like when you play chess, there's an expression, see the whole board. So, okay, the bishop, the king, the queen, whatever. One of the pieces isn't working anymore. Maybe you lost it. Maybe it's in the wrong part of the board. Whatever. There are other pieces on the board. You don't give up the bloody game. In fact, you weren't playing it very well to begin with. If you're only using one piece and one move. There's all sorts of pieces that work differently and have different moves. So I look at the whole chess board and think, wait a minute. It turns out most of the stuff we do in climate change isn't just the federal and UN level policy makers. It's also business leaders and investors and philanthropists, and most of all community leaders and activists and artists. And just neighborhoods and households and communities and we all have all these levers in front of us. How dare we just kind of give up on that and abdicate our responsibility to some, you know, jet-setting crowd of diplomats that hopefully will have our best interest in mind. So let's play the whole chess game. And from opening gambit to checkmate, there's a whole lot of levers and a whole lot of pieces that we haven't even begun to deploy. And that's where the game's gonna be won.

Kousha Navidar: Jonathan Foley, executive Director of Project Drawdown, and Nikhil Swaminathan, the CEO of Grist. Thank you both so much for joining us. Really appreciate it.

Nikhil Swaminathan: Thank you, Kousha.

Jonathan Foley: Thanks for having us. Thank you.

Kousha Navidar: It's the end of the show, time to share one more thing. Ariana, what you got?

Ariana Brocious: Yeah, I read an interesting article this week about microbes, methane-eating microbes, called methanotrophs. They live in lots of places, deep sea vents, rivers, tree bark. And in some places they eat methane before it reaches the atmosphere which is very compelling from a climate perspective. So this is in the category of things that might help us down the road, not things we can employ today. But really interesting research and possible nature-based, nature-aided solutions to climate pollution. So more to come in that field but really interesting.

Kousha Navidar: That's fascinating that you can find them in the deep sea and tree bark. That's wild. And that's our show. Thanks for listening. You can see what our team is reading by subscribing to our newsletter – sign up at [climate one dot org](https://climateone.org).

Ariana Brocious: Climate One is a production of the Commonwealth Club. Our team includes Greg Dalton, Brad Marshland, Jenny Park, Austin Colón, Megan Bisciegli, Kousha Navidar and Rachael Lacey. Our theme music is by George Young. I'm Ariana Brocious.