

[MUSIC PLAYING]

CATHY WURZER: We're already seeing the effects of climate change on our world-- mind-boggling amounts of rain and snow and the damage that can cause, scorching heat waves that wither crops and spark devastating wildfires. Heat waves, droughts, floods, wildfires, hurricanes they're all killing and displacing people worldwide, and scientists say it'll get worse unless something is done fast. Here to help us make sense of the new United Nations report and its impact on Minnesota is Roopali Phadke. Dr. Phadke is a professor of environmental studies at Macalester College. Welcome back, Professor.

ROOPALI PHADKE: Good afternoon, Cathy.

CATHY WURZER: Now, the planet is nearly 2 degrees Fahrenheit warmer than it was in the late 1800s and many folks would shrug to hear that. It doesn't sound like a lot. But the report says we're on track to exceed 5 degrees Fahrenheit of warming by the end of the century. Why is that so worrisome?

ROOPALI PHADKE: Well, this report that came out yesterday was meant to grab our attention. The Intergovernmental Panel on Climate Change-- this is the body that works with the UN to study the causes of warming, impacts on people, and solutions to halt warming-- has told us that if we don't do anything dramatic, we will be looking at 5 degrees warming. And if we take the urgent and immediate action that they tell us to shift away from fossil fuels, we still have a chance to hold that warming to 1.5 degrees. And that difference between 1.5 and 5 degrees as a global average is really quite staggering.

CATHY WURZER: But that report also said we're still pumping CO2 and other greenhouse gases into the environment, and that looks like that's not abating any time in the near future. That should give folks pause for-- some kind of pause here I would think.

ROOPALI PHADKE: Right. I mean, what we know is that the Earth has already warmed about a degree Celsius and that we're going to hit that trajectory of 1.5 within the next 10 years. So some of this is already baked in. And so now we need to think about what we can do to really minimize the worst of those impacts. What I took away from that report was, first, this call for urgent and immediate attention. But the second part was that vulnerable people really in every society will be made even more vulnerable if the temps increase beyond 1.5. So there's two messages that we need to heed.

CATHY WURZER: Let's talk about those who are vulnerable. I'm wondering here-- there's been discussion over the past few years about Minnesota, specifically Duluth as a climate refuge. And I'm wondering, does that mean we're more insulated from some of these impacts than other parts of the world?

ROOPALI PHADKE: Well, no, right? You know, today is the first day of spring. I'm looking out my window. I see a foot of snow. That may make it hard for people to believe that this report has a message for us. But it does because Minnesota is among the fastest warming regions of the country. We know Minnesota's already warmed an average of three degrees. And we are projected to warm to that 5 degrees that the IPCC is talking about in our region if we do not act.

But the good news is that our state is ahead of the pack in acting with a sense of urgency. Governor Walz signed the 100% energy bill last month. This is a really important step towards addressing the urgency. But it's not going to just be about technology. And I think that's something we can learn from that Duluth story actually.

I love that story that came out in the *New York Times* about Duluth being a refuge in this era of climate change, and that notion that Duluth is climate-proof is because of access to fresh water, the forest that's around the city, the inland location. But there's a lot more to being climate-proof than just having the right sort of natural endowments.

And I believe the mayor of Duluth said so much when she said that we need to do a lot more to truly be climate-proof. And that's the social policy. And social policies are needed to be climate-ready and climate-resistant and resilient, and those are about housing and infrastructure and community development. And those are the social policies that target the most vulnerable.

**CATHY
WURZER:**

You know, I talked to you this past November when you attended the-- well, COP26, I believe, in Scotland, which is the annual UN Climate Conference. And I know there was talk there and in this report that there is still time to change course to avoid the worst impacts, and you mentioned that briefly here. Does-- what gives you hope that we can successfully reverse climate change or at least stop it from getting any worse?

**ROOPALI
PHADKE:**

Right, right. I mean, we do need that hope. We need to get out of bed every morning. We need to believe that this snow is going to melt, that spring is going to come our way. There are a whole range of things we do as individuals and as communities that move us towards that urgent and immediate action, and I see that happening all around me. I see more charging stations. I see more people trying to make their homes energy efficient.

But there are other things that are really important that we can drive hope from as well. A few years ago, I was part of a study that we did with the city of St. Paul that was called Ready and Resilient. And what we are really looking at is how we, in our social networks, make our neighborhoods stronger because we know that strong communities are actually the linchpin to climate resiliency.

And so if we can do that, there's no reason why Duluth is going to be the only climate refuge. All of our cities in Minnesota could provide that kind of climate resiliency, and not just for people who are going to move here but for those of us who live here now.

**CATHY
WURZER:**

You know, that sounds-- there is some positivity to what you say there, but the report, as I read through it, it's pretty dire. Greenhouse gas emissions need to fall almost immediately to put the world on a path that limits the worst impacts. And that about face doesn't seem possible. Is it?

**ROOPALI
PHADKE:**

Oh, I think it is quite possible. We know that after the Paris Accords and then as of the last few years some of the really most dramatic changes that were predicted-- temperature increases of 7% to 8%-- we've already been able to mitigate that. And so we're not talking about 7% or 8%. We're talking about 4 and 5 degrees I should say instead. And that's because nations pledged to really impact their emissions targets.

The federal bill that Biden passed last year was truly generational and will make a difference for this nation, and that leadership will make a difference for the world. We're actually looking ahead to the next UN Climate summit, which is coming up this fall, and we'll have a delegation of students and faculty attending again. And we'll see if some of the impacts of the US's federal policy and the work that's being done at the states is starting to significantly move the needle for other countries as well.

CATHY All right. Professor, always appreciate talking to you. Thank you so much.

WURZER:

ROOPALI Thank you, Cathy. Enjoy the first day of spring.

PHADKE:

CATHY We will. We definitely will. Thank you so much. Roopali Phadke is a professor of environmental studies at

WURZER: Macalester College in St. Paul.