“Turning Down the Greenhouse Gases in Your Air Conditioning” Transcript

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IRA FLATOW: And now it's time to play good thing, bad thing, because every story has a flip side. Last December, 195 countries signed the Paris Climate Agreement. Each country pledged to curb emissions to keep global temperatures increase well and keep it under 3.6 degrees Fahrenheit. And countries will meet every five years to set even higher targets. Pretty ambitious goal.
Well, this week over 100 countries signed a smaller, but no less ambitious climate change agreement. The target? Phasing out hydrofluorocarbons or HRCs. These are the chemicals in your air conditioner and your refrigerators. My next guest is here to break down that agreement. John Upton is a senior science writer for Climate Central based out of New York. He and I are here in our CUNY studios. Welcome to Science Friday.

JOHN UPTON: Thanks very much. It's great to be with you.

FLATOW: What is the problem raised by these HFCs here?

UPTON: To understand that, it helps to really think back to the 1980s when we discovered that the ozone layer was in a lot of trouble. And the reason the ozone layer was in trouble was because of these chemicals called CFCs. So the world got together very quickly and basically reached an agreement in Montreal in the Montreal Protocol to eliminate the use of these CFCs. And that's been a very successful agreement.

Since then, industry and companies have protected the ozone layer by removing the chlorine from these chemicals and producing what's called HFCs. So what happened on the weekend is in recognition of the fact that these HFCs are very powerful greenhouse gases, countries got together and they agree to amend the Montreal Protocol to also include HFCs.

FLATOW: And these are very powerful greenhouse gases, the HFCs?

UPTON: These are some of the most powerful greenhouse gases that you can find. Some HFCs are fine, but others are more than 100 times as powerful as carbon dioxide, in some cases, well over 1,000 times.

FLATOW: Wow. And so the good news is that they got together to make this agreement, which will have a big impact.

UPTON: It could potentially. I mean the thought is that this would prevent a full degree Fahrenheit of warming by the end of the century. So this is a very important agreement, and it could actually have some very real and meaningful impacts.

FLATOW: All right. So much for the good news. What's the bad side, the bad thing about this?

UPTON: Well, there are some criticisms of the agreement, because countries like India, which has a fairly large manufacturing base, they've received a very long lead time. They really don't have to start reducing their use of these chemicals until 2028. And the same goes for Pakistan and some of the other countries that they export to.

The reason that's not as serious as it might sound is because as developed countries, including the US and in the European Union, as they institute their own domestic rules, which they're already doing to eliminate these chemicals, the alternative products will become much more affordable, and then countries like India will be able to start using them without having to invest too heavily in the research and development phase.

The real concern here in the US-- after this agreement was reached, a number of media reports indicated a week ago that there would be no need for Senate ratification of this. And as we reported on Monday and as The Hill is reporting today, there's not much basis for that. This is a fairly substantial modification to an international treaty. And experts on international law point out that every previous amendment to this agreement has required Senate approval. And it's not just that the Senate has to approve it, but they need a 2/3 ratification vote.

FLATOW: We're going to get that in this Congress?

UPTON: That's a very good question. Let's see what happens after this election, what the mood is like. The Senate, even the Republicans and so forth, have always been very supportive of efforts to protect the ozone layer, but we know that this is a climate agreement. This is designed to protect against global warming. And there is this ideology among some of these Republicans in the Senate that they just simply oppose any kind of an effort to protect the climate.

FLATOW: So we're going to have to see what happens January 20.

UPTON: Exactly. Yeah. Yeah.

FLATOW: John Upton. Thank you very much--

UPTON: Well, thank you.

FLATOW: --for coming to be with us. John Upton, and a senior science writer for Climate Change.