Gina McCarthy: I've always thought that health was important, but the economy is too. And the interesting thing about climate change is you can have both, and that's what we should demand.

Robert Stavins: Welcome to Environmental Insights, a new podcast from the Harvard Environmental Economics Program. I'm your host, Robert Stavins, a professor here at the Harvard Kennedy School and director of the Harvard Environmental Economics Program. Today, we're really very fortunate to have with us Gina McCarthy, who served in the Obama administration as the 13th administrator of the US Environmental Protection Agency from 2013 to 2017, and is now a professor of the practice of public health at the Harvard T.H. Chan School of Public Health, where she is the founding director of the school's Center for Climate, Health, and the Global Environment. Welcome, Gina.

Gina McCarthy: It's great to be here, Rob.

Robert Stavins: Before we talk about your extensive experience working on climate change and for that matter, many other environmental problems at EPA and your current work at the Harvard School of Public Health, let's go back to how you came to be where you've been and where you are. And when I say go back, I mean I'd like to start by going way back. So where did you grow up?

Gina McCarthy: I grew up just south of Boston. My family is originally from Dorchester. So when I was a young kid we moved out to Canton, Massachusetts, which was a few miles south of that.

Robert Stavins: And then primary school was where?

Gina McCarthy: St John's Elementary School in Canton, Massachusetts. High school was Fontbonne Academy in Milton. Then I went to UMass Boston.

Robert Stavins: And how did you like UMass Boston?

Gina McCarthy: I loved it.

Robert Stavins: What did you study there?

Gina McCarthy: My undergraduate degree was in cultural anthropology and the reason for that is I don't think I was, in fact, I know I was not the most serious student in high school. St John's Elementary School was so tough, they taught me just about everything you needed to know. And so I sort of skirted by in high school. And my dad was a school teacher for 40 years. So, we really didn't have the money
to go to a fancy school. Not many people have had the choices then that they now have for schools.

So, I picked UMass Boston and I have never regretted it. It was the best education for me. I picked anthropology because I'd never taken it before. So, if I didn't like school before, I thought this was a good opening for me. And I loved it. It was just a wonderful experience for me, as a people person, to understand differences of opinion. It was really a cultural eye opener for me that has always been usually beneficial.

**Robert Stavins:** Now did you go directly from there to graduate school at Tufts or did some other things intervene?

**Gina McCarthy:** Yeah, probably intervening was going skiing and other things a couple of years, but no. I went in and I actually continued part time doing work like switchboard at Children's Hospital, life guarding, I mean you name it, waitressing for a while and so it was a hiatus of about maybe one and a half, two years when I started to realize that I had to get serious again and think about what I actually wanted to do.

**Robert Stavins:** But then you turn to environment for the first time, at least in terms of academia at Tufts. How did that come about?

**Gina McCarthy:** Well, I'm not sure it was environment. I went to Tufts in two different programs. It was one of them was called Urban Environmental Policy and the other was The Environmental Health Engineering Program. And really it was the Environmental Health Engineering Program that originally got me interested in this because it really looked at how you look at environment as a fundamental health issue. And so it really got me started looking at things like community health centers at that time in terms of frontline delivery, how community health workers could promote public health in a more population-based effort. And I thought it was fascinating and honestly since then, I've always looked at my career even though every agency I've worked for says environment in it, really is essentially a public health agency trying to deliver clean air and clean water. It never viewed to me as being in any different.

**Robert Stavins:** And that perspective is certainly reflected a lot in your later work, all the way up to EPA. But before you got to EPA, you served in a number of administrations both in Connecticut and Massachusetts. So, how did that come about?

**Gina McCarthy:** Well, I actually started working at a local board of health. I started working at community health centers, then I shifted to the local board of health because everybody walking into those health centers were really struggling with poor nutrition because they didn't have healthy food, lead paint poisoning. I mean everything that I suspected with the challenges of these poorer communities, minority communities, were really environmentally related.
And so, I started at the Board of Health in Canton and I started doing things there that were implementing the recent EPA and US laws on environment. And I got pretty aggressive on implementing those, not in terms of the outcome but in terms of engaging the community in these issues. So, I ended up representing boards of health on a committee at the state level, and I ended up doing a lot of work there, and I eventually got hired to staff and the rest is sort of history. It ended up being that I was appointed first by Governor Dukakis during the second term here in Massachusetts and I ended up serving Governor Romney for his first couple of years before the opening in Connecticut for the secretary position opened up, the commissioner level position.

Robert Stavins: And then from that commissioner position in Connecticut, you went directly to the Obama administration to the Office of Air and Radiation as assistant administrator there. Is that right?

Gina McCarthy: I did. Fortunately, during the time in Connecticut, we moved forward with the Regional Greenhouse Gas Initiative. And I was part of the board to initiate that and help to design it and get it moving. And I met Lisa Jackson and Lisa Jackson ended up being the appointee for President Obama as administrator of US EPA, and she called me and we exchanged ideas, and she asked if I wanted to go to EPA. And I said no. I was kind of having a lot of fun in Connecticut. And then she said again, "Well, what if you got to do air and climate?"

I said, "Bing, bing, bing, bing, bing. Yeah, I'll do that."

Robert Stavins: And for many years, I think going back to the 1970 Clean Air Act itself, the Office of Air and Radiation has been the premiere office. That's the one which has, I think generally been viewed within EPA as the most critical.

Gina McCarthy: Well, it's the one that's most active because frankly, it's the one that has the best law. Because air is not confined to any political boundaries, it's seen as being a vital federal role to ensure that states play fairly, and that communities are protected across the United States as best we can in an equal way. And so it always challenges more and more decisions to be made every year that are really seen as very vital and visible to public health. And so, it was a gift for me to end up there.

And frankly, Rob, one of the things that attracted me was to take a look at all of the air pollution that was coming from upwind, and ending up in New England because that's where I live and that's where I've worked. And I was really frustrated by the fact that so few utilities upstream and upwind were actually doing the kind of aggressive cleanup work that we were doing in New England. And I resented the fact that New England could shut off all its lights tomorrow and still not have clean air. So, I've considered that to be a big fairness issue, and a big lag in EPA's responsibility under the Clean Air Act to protect the downwind states.
Robert Stavins: Now, as I recall, although you had already been confirmed by the US Senate for the assistant administrator position, when you were nominated by President Obama to be the administrator of EPA, it was a rather contentious experience in the US Senate. So, why was that?

Gina McCarthy: I must've done a hell of a job as assistant administrator. It really was at that point in time, I think just an opportunity to slow down the ability of the agency to function at full steam. That did not work because there was a great deputy administrator there after Lisa Jackson, Bob Perciasepe. He kept the trains running. It was frustrating to me because it wasn't really a challenge by the industry.

We had done a lot of work in the first four years that I was there, and you would have expected that that would have been the problem. But I don't think it was. And I think there were a lot of industry folks that stood up and said, “You know, she's doing a bit of a fair process here.” And while we may not like the outcome, we had a lot of ability to be heard, and there were changes made. And so I was really proud of the work I did in those first four years and hoped it would grease the skids a bit. It didn't. And I honestly think that was just a continued challenge for the Obama administration by a Republican Senate that just simply didn't want to confirm.

Robert Stavins: So, it was part of this process of political polarization, which has been increasing over the years. If we take the numbers by which the Clean Air Act amendments of 1990 passed in the House and Senate, it's about, as I recall, something like 92% of Democrats and about 87 to 90% of Republicans. Contrast that with something we'll talk about in a moment. The Waxman-Markey legislation, which of course you were working so closely on.

Gina McCarthy: I think a lot of it was the increasing partisanship around the issue of climate change.

It was no secret that that was the thing that President Obama wanted to do next and I was pretty well positioned given all my work at the state level to get this and move it forward.

Robert Stavins: Yeah. So, before we really dig in on climate change, which I do want to do with you, I want to just step back and think about all of your time at EPA where you worked on a lot besides climate change of course. And I'm interested in what was both the best part of that job, and what was the worst part of that job – those four years as EPA administrator?

Gina McCarthy: The first four years, well, there's the fact that the prior administration under Bush did very little to meet their obligations under the Clean Air Act. So, when I got there, I was faced with requirements from the courts in a variety of different ways, court orders or settlements, and with very tight timelines to get a whole lot of things done. And some of them were really important; others not so
much. And so, trying to figure out how you could get the most important work done was all tied up with all these other obligations. And so, the challenge for me was to figure out really how to sequence this. How to get the staff focused on the right things, how we might get some additional time for what we call mandatory duties that were real and we had to do them, but wouldn't yield quite so much. And explaining that if we focus on the more important things first, it may be beneficial, and more beneficial.

So, that was the biggest challenge I had was people were running all over the place to get decisions done. And you start new. I don't want decisions that don't fully contemplate all the issues. And I think we did a great job getting there, but I think the staff worked 24/7, and they may have liked it because it's the first time they were challenged in eight years to do these things, but I felt like they were really overtaxed and remained that way, frankly for all of the time I was there.

Robert Stavins: Now the legislation on climate change, this very comprehensive bill, which included a cap-and-trade element, but a lot of other aspects as well, what's often referred to as the Waxman-Markey bill, of course it succeeded in the House of Representatives on a largely partisan vote, and then it never came to a vote in the Senate. Reflecting on that now, is there anything that you would've done differently, or that you wish for that matter of the White House or the administration had done differently?

Gina McCarthy: Well Rob, I think President Obama really banked on the Waxman-Markey bill proceeding and becoming law, but it got so embroiled, it became what many people call a Christmas tree, which is, "Let's do this law, but I need an exception here, or I need a limitation here, or we have to address trade issues here," which were not wrong. But it was the challenge of the cap-and-trade approach that became just overwhelming and so it delayed things. And I think the president, his main focus at that point was healthcare, and moving forward with the Affordable Care Act. So, the emphasis, I was never really engaged much, the staff was, in providing support for cap-and-trade legislation to do the analytics behind it. I was never really engaged. That was managed at the White House.

So, what we did instead was recognize that we still have obligations under the Clean Air Act. And until those obligations go away, we better start thinking about it. Because by then, when I went in there, Mass. v. EPA had happened. The Supreme Court had spoken to the obligations under the Clean Air Act to consider carbon pollution as a pollutant under the Clean Air Act, if it really seriously impacted health and wellbeing. So, instead of focusing on what was going on on the Hill, we did our own work to get various constituencies together. We did stakeholder processes which very much were robust. We did it with industry, environmental groups, with government entities, with local communities, trying to figure out what the range of alternatives were to meet our responsibility in obviously the event that the cap-and-trade program wouldn't move forward, and these obligations would still be on us.
So, I think we made good use of that time and we really challenged folks to step up and think about, "If this doesn't happen, what's the best thing to do under our laws? How do we get at this?" And so it was I think a very engaging and public and transparent process that helped to allow us to move more expeditiously over time and addressing some of these broader challenges using the Clean Air Act.

Robert Stavins: Now, you mentioned the Supreme Court decision, the response to which was the endangerment finding while you were assistant administrator, I assume of Air and Radiation, can you say something about that endangerment finding? Because one thing that's striking to me is that it really reflects very strongly in its substance where you started us off on in terms of your interest in public health.

Gina McCarthy: Yeah, it does. The endangerment finding it, remember when I talked about the decision by the Supreme Court, I said when there's a real impact on health and wellbeing, that's when EPA is obligated to act. And the way in which the EPA moved forward was a sector-based approach. And so, we went to the largest sectors first. If you remember, even before I got my first job at EPA, they were talking about the clean cars rules, and agreements with the auto manufacturers, which meant that if we were going to effectively work with DoT, where they would look at fuel economy, we would look at greenhouse gas emissions as a pollutant. Then we would have to do an endangerment finding for that sector, and that became one of the first big tasks to deliver because without understanding the implications of the emissions from cars on the issue of climate change, then we wouldn't have been able to move forward, and we wouldn't have been able to have the documents we needed to express the impact on public health and society as a whole, on welfare, wellbeing. In order to underpin our authority, we needed to actually move forward by regulation.

It was an enormous undertaking, just an enormous undertaking because it had the look at the 1,000+ studies that underpinned the Intergovernmental Panel on Climate Change, the IPCCs report, and then in the middle all that, what they did actually was take each study and try to summarize it in a condensed way to develop the endangerment finding. We had great scientists working on this, but they had to contact every author to make sure that what they summarized was accurate and get them to sign off. And then in the middle of that was Climategate. Do you remember that one, Rob?


Gina McCarthy: Which was the craziness of leaked emails that looked like, or were made to look like scientists were somehow stacking the deck in terms of their outcome because of what they wanted it to be, which turned out to be completely false. So, they went back and removed all of those studies from consideration and relooked at it again. It ended up being just a massive document that continued to be updated every time a new sector was looked at. We took that and we updated it, and so it's a wealth of science information that has not been challenged effectively.
Robert Stavins: Yeah. That's what's striking is that although the current administration has sought and in some cases succeeded in turning back so many initiatives of the Obama years, they have not even attempted, despite the fact that some groups have called for it, reopening and trying to overturn the endangerment finding because the record is so solid apparently.

Gina McCarthy: Well, I really don't know the motivation behind a lot of the decisions this administration's making, but you have to assume that the endangerment finding is something they just don't want to re-look at because it's gone to the Supreme Court a number of times. It's very well done. It's substantive, and frankly I think they read the tea leaves that attacking the climate science now is not exactly where people want to be. They're worried about it. They know that things are changing and it's more what do you do about it? That's the better discussion for people to have, and I think they know that.

Robert Stavins: Now, when the Waxman-Markey legislation didn't go forward in the Senate, then eventually administration, including EPA of course, came up with what's generally known as the Clean Power Plan as a regulatory approach instead. That now has been overturned by the current administration with what they call the Affordable Clean Energy Rule. Have you taken a look at the Affordable Clean Energy Rule?

Gina McCarthy: Yeah.

Robert Stavins: So, tell us your reaction to that, please.

Gina McCarthy: I think it's hard to explain all this, Rob, and maybe you can help me with it, but The Clean Power Plan was really a focus on reducing greenhouse gases from the power sector. And we realized in doing that, that power isn't about an individual facility, it's about a system, it's about regions, it's about interconnected systems. And we felt pretty strongly that if you were going to design a strategy around this, you had to look at that interconnected system, which thankfully gave huge opportunities to look outside the individual facility, and to look at setting a standard that really recognized that states and regions can do something much more creative than looking at within-the-fenceline changes. And that was different than this part of the statute had done things before, but it's part of the statute that's how they would have been tested.

So, we designed a system that really allowed ultimate flexibility for the states to either regulate their utilities on their own, look at regulating them regionally, look at joining a national system, and we were learning that from the acid rain program, how well and effective that was to actually make sure that the reductions were coming in the least expensive way. So, it kept prices low, and in fact, and the later years would have reduced them, and it would achieve like 32% reduction off of 2005 baseline by 2030, which was pretty big at that time. So, what the administration did was instead of taking that approach, they decided to design this Affordable Clean Energy Rule, thinking that you each utility and each unit would need to look at itself separately.
Robert Stavins: So, within the fenceline, to use the phrase you used.

Gina McCarthy: Yeah, all within the fenceline. Which means that it was way more expensive for units of reduction, and in fact by 2030 it would have gotten at the most they thought one and a half percent beyond baseline. But when we looked at it and looked at what it essentially would do, it would have really done nothing but provide an opportunity to do nothing for a really long time.

Robert Stavins: And also at relatively high cost, because whereas the Clean Power Plan was potentially cost effective because it facilitated, indeed in the final form, it really encouraged cap-and-trade systems for the states or even interstate. That's essentially prevented by within-the-fenceline approach.

Gina McCarthy: That's correct. And what the original proposal for the Affordable Clean Energy Act Rule did was also sort of try to encapsulate changes to what we call New Source Review, which is a permitting program that looks to make sure that as utilities expand, they don't continue to contribute more and more emissions. And if you look at both of those changes -- the Act itself and New Source Review -- which in the end they have separated out, you will see that it really opens the door for utilities under the guise of complying with this rule to increase their efficiency, wouldn't any longer be capped in terms of their level of emissions. It was basically a two part giveaway to industry to actually pollute more, and to provide no significant opportunity for greenhouse gas reductions.

So, it was disturbing in many ways. And I know you as an economist would have noted the awkwardness of the cost-benefit analysis that tried to stretch to say it was somehow cost effective, but absolutely couldn't.

Robert Stavins: It couldn't, yes.

Gina McCarthy: And it was discouraging to say the least to see that in the Clean Power Plan cost-benefit analysis, they embraced indirect cost to try to make it look less expensive. But in the Mercury and Air Toxics Standard, they decided you weren't allowed to do that, and they had already done that before. So, it's the inconsistency to stretch for an outcome is really what I think most disturbs me is that you got to play by the rules. There are rules.

Robert Stavins: Yeah, yeah. Now, at the same time that you were very focused on the domestic aspects of climate change policy, the Obama administration of course was very engaged, think of Todd Stern over in his position, and the people at the State Department in his office, and others in the administration, including yourself, engaged in the international negotiations under the United Nations Framework Convention on Climate Change that eventually led to the Paris Climate Agreement. Now, which of course Mr. Trump, President Trump has said that he will withdraw from November, 2020 the soonest that could actually happen. What's your assessment personally of the Paris Climate Agreement? Some
people see it as a half-full glass of water or more. Some see it as a half-empty glass of water or less. What's your assessment?

Gina McCarthy: Well first, Rob, I think President Obama's strategy when I went in was well articulated in his Climate Action Plan because the whole reason to spend so much time looking at the Clean Power Plan, looking at another round of reductions in cars, looking at reductions in trucks, the biggest sectors where green-house emissions are available to be reduced cost-effectively, we just moved that forward because it gave him credibility to work with the two big kahunas, which is China and India. And so we got there, and we did get the Paris agreement. And the reason why I believe that it was so pivotal was because it really brought every country to the table recognizing that every country had responsibility here. Certainly, no countries other than China and the U.S. are more responsible, but it brought everybody to the table and everybody set rules. And we provided opportunities for funding the work in the developing world so that they could develop plans that could be assessed and could be addressed. And every five years the plans needed to be revisited. The goals need to be revisited. So out of the gate, it was a wonderful accomplishment. But, the trick is that it's got to be continued and there's got to be U.S. leadership in order to really continue to make it real. And with that missing, I don't think anybody could really argue that there's great progress being made on the Paris agreement and those commitments. But my hope is that a lot of other activities in the United States at the state and local level are really going to take up some of the slack, and also allow us to continue to not lose too much. But clearly, we have to have a next president that recognizes the challenge of climate change and the challenge it poses to our health and wellbeing today and our international security and move forward on Paris.

Robert Stavins: And, in that regard, it's perhaps comforting then to take note of the fact that if the president does execute the withdrawal from the Paris agreement in November, 2020 I think it's two days off of election day, that the Paris agreement itself provides that any country can rejoin in 60 days, which is putting us close to inauguration day, if there is a change of administration.

Gina McCarthy: I thought it was 30, but I'll take 60. Yeah. It's not a big momentous change. And I think what we've lost is a lot of credibility among the international community. And that's going to be hard to get back. People looked at the Paris agreement and said, "Well, there's no punishment here." But those are people that aren't familiar with international agreements because that's not what it's about.


Gina McCarthy: It's about saving face. It's about providing resources. It really was a joyous occasion, and maybe the 60 days after the election, we'll find some more joy.
Robert Stavins: Yeah. Well, before we run out of time, we're getting close to the end of our time now. Let me ask you to tell us just a bit, a few words about the new center that you're running at the School of Public Health. So, what are the objectives, and how is it going?

Gina McCarthy: Rob, thanks for that. Actually, it's called the Center for Climate, Health, and the Global Environment, which you mentioned and really it's an effort to try to recognize real science, and science in particular about public health and connect that more directly with climate change, about how climate change exacerbates that, getting the medical community involved, getting people to understand it's about them, it's relevant to them. I've always been distressed at the climate conversation seemingly about polar bears or glaciers, or faraway places instead of recognizing that it's here and now and it's important to us. So, we try to use real science, the science developed at Harvard School of Public Health, to re-look and coordinate the challenges that we see between air pollution and health, between nutrition and health, between population science and health. All of these things go together systemically, and it provides us an opportunity to not just make climate change personal and actionable, get people awake, but to really focus on solutions available, Rob.

We need to broaden the engagement around climate. We need to talk about how good the answers are on climate, and how much better the world would be if we think about aggressively moving. And it's better for us. It's better for our health. It's better for our kids' future. And so, I want to focus on the positive. I want to keep hope alive, and get people's head out of DC, and into their own communities, their schools, do what's right for our kids. Thousands of them are stepping up, and I want millions of people to recognize that. My favorite sign at the Youth Climate Strike was, "If you won't act like adults, we will." And I just want people to act like adults.

Robert Stavins: This really takes us full circle because we can note now how appropriate it is given where you started from in terms of your interest in public health and environmental health and then leading into environmental policy that although we try to get you over here to the Harvard Kennedy School as frequently as possible, as do other parts of Harvard, you're primary appointment quite appropriately is in the School of Public Health.

Gina McCarthy: You're right. I came back from where I started from. Hopefully that's a sign of consistency as opposed to being boring, but it matters. I've worked for so long trying to get people to first understand the challenge and the need to act on it, and secondly, to design really good solutions that do more than one thing. I've always thought that health was important, but the economy is too. And the interesting thing about climate change is you can have both, and that's what we should demand.

Robert Stavins: Yes. Well, listen, thank you very much, Gina, for taking time to join us today. Our guest today has been Gina McCarthy, professor of the practice of public health at the Harvard T.H. Chan School of Public Health, director of the Center for Climate, Health, and the Global Environment.
for Climate Health, and the Global Environment, and formerly the administrator of the US Environmental Protection Agency. Please join us again for the next episode of Environmental Insights, conversations on policy and practice from the Harvard Environmental Economics Program. I'm your host, Robert Stavins. Thanks for listening.

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