Rob Stavins:

So, I'm delighted to welcome all of you to this session of Conversations on Climate Change and Energy Policy, a virtual forum from the Harvard Project on Climate Agreements. I'm your host, Rob Stavins, a professor here at the Harvard Kennedy School and Director of the Harvard Environmental Economics Program and our Project on Climate Agreements. In this series of webinars, we're featuring leading authorities on climate change and energy policy, whether from academia, the private industry, NGOs, or government. And today, we're fortunate to have with us, someone with solid and in fact, very important experience in government.

Rob Stavins:

But before I introduce today's guest, let me say a few things about the logistics for those of you who are joining us for the first time. We're recording the webinar and a link will be posted on the website of the Harvard Project on Climate Agreements. Importantly, we want your questions, which I will then pass on to our guest. If you want to pose a question, at any time whatsoever, including right now, use the Q&A function that's at the bottom of your screen. And about halfway through the hour, more or less, I'll begin to turn to your question and will be able to pass those on to our guest today. We're going to adjourn promptly at about five minutes before the top of the hour. That's about 9:55 AM Eastern Time in the United States. I recognize that many of you are joining from various parts of the world. And for some of you, indeed, it may be late at night or very early in the morning.

Rob Stavins:

With that, I'm very pleased to introduce and welcome today's guest, Congressman Garret Graves, Republican member of the US House of Representatives from Louisiana's Sixth Congressional District. He plays a very important leadership role as the ranking member on the Select Committee on the Climate Crisis. I first met the Congressman just in January of this year when we were both panelists in a session of the annual AEA or American Economics Association meetings. Congressman, welcome to Conversations on Climate Change and Energy Policy.

Garret Graves:

Hey, thank you. Appreciate the opportunity to join you and thanks everybody for being on today.

Rob Stavins:

I want to begin by stepping back from the climate issues and the energy issues of the moment and reflect with you on the fact that our major environmental statutes, and this may be a surprise to many of the people who are with us today, that our major environmental statutes in the United States, The Clean Air Act, The Clean Water Act, and several others for that matter, were enacted and signed by Republican President Richard Nixon in the early 1970s. And the pathbreaking Clean Air Act amendments
of 1990 with the SO2 allowance trading system to cut acid rain by 50 percent was actually developed by
the George H.W. Bush administration. Passed by in an initially resistant Democratic Congress and signed
into law by President Bush. And those are just two of many reminders I could offer for the fact that
energy and environment, were, for many years, fully bipartisan issues. They were sometimes regional
issues, but nearly always bipartisan. Congressman, what's happened?

Garret Graves:
All right, I'm going to, in this case, rather than trying to come up with my own answer, I'm actually going
to rely on others. There's a great quote from George Washington in his farewell address, and keep in
mind, farewell addresses is where politicians are most courageous. And he had a great line and he said,
"Political parties may occasionally advance popular ends. But over time and change, cunning, ambitious
and unprincipled men..." And I'll add women, "... will usurp the power of the people and assume the
reins of government for themselves. And I think that you've seen this migration from largely working for
the best of America, but through your ideological lens, you can't deny that's the case. To politics
becoming a blood sport that is really party first and country after.

Garret Graves:
And I'm just going to continue on that theme of I can't improve what other people have done. So I'm
throwing this up right now. I keep this video on quick draw. This is just a YouTube video showing what
has happened over the past several decades in regard to voting in Congress. [Displays his iPhone to the
audience.] And the blue dots are Dems and our dots are Republicans. And it just goes through showing
the voting trends that have happened. And so, I mean, just look at this. This shows you, effectively, the
more the dots are intertwined, the more votes are a little bit more bipartisan. And you can just see over
decades, if I'm reading this correctly, we're in the 1970s right now.

Rob Stavins:
Yes.

Garret Graves:
And you can see how the vote begins right around now to take some pretty different trajectory. And so
certainly in the environmental field it's happened. But I think it's also happened across the board in
other areas as well, where things have just become more divisive and you're seeing fewer and fewer
things that have bipartisan support.

Rob Stavins:
That's a great history of it, that's displayed visually from those roll call votes. Thank you for that. Then I'd
ask, if that's where we are and you've diagnosed how we've gotten here, what can be done about it?

Garret Graves:
Well, what can be done about it? One is, I think, and this may not sound great out in the public, but the
relationships among members of Congress has become just these incredibly stale relations. And let me
just explain. I serve on three different committees. On the three committees I serve on, we almost
always meet in a partisan manner unless there's a public hearing or a markup session, or what have you.
Whenever we meet as members of Congress, we almost always meet as distinct parties, the Democrat
caucus in one side and the Republican conference in a completely different room.
Garret Graves:

And so the opportunity for personal relationships has been limited to really just one experience, and that was, when I first got elected as a freshman member of Congress, the Library of Congress hosted an event for brand new members and their families. And so I met spouses. I met kids. In fact, our kids are still friends with a few others. But through just that personal, just recognizing people for humans, it doesn't really happen.

Garret Graves:

One other thing that we've done, that's been a big help, is we've invited bipartisan members of Congress to come down to our district, and said, "Look, south Louisiana, we're a little different than a lot of other areas in the country. Come see what it is we represent, who we represent." And just take people on tours and do meetings and just lunches and bringing folks in to say, "Look, I'm not asking you to vote the way I vote, but I do want you to see who and what we represent and why we do and say what we do." And I think that's been powerful. There's an organization called the Bipartisan Policy Center that has tried to build on this. And I think things like that are really helpful in just making people, not necessarily, as I said, vote the way other people vote, but at least understand and being able to empathize or sympathize in terms of the constituents that they're representing.

Rob Stavins:

Do you see things changing? Is there a discernible trend? I mean, there was a certain trend that was obviously exhibited by what you showed from your phone. What if we go out four years or five years to future Congresses, we think you're going to see a continuation of that? Is it stabilized now in this polarization? Or is it possibly going to turn around?

Garret Graves:

Unfortunately I don't see a trend in the right direction right now.

Rob Stavins:

Okay.

Garret Graves:

I don't. I think that people are taking things that folks used to be able to really rally around, kittens and dogs and apple pie and things along those lines, and have found ways to make them partisan. I had high hopes that when there was some type of crisis, that that was going to cause unity. And one of the things, I'm again, from south Louisiana, and you may remember years ago, Congressman Steve Scalise, a fellow Louisiana member of the delegation, he was shot. And it really did sober a lot of people for a brief period of time, where folks were like, "Oh, wow. Maybe this rhetoric really is a lot more powerful. Maybe we have weaponized it a lot more than we should have." And it did make people think, but it lasted a very brief period of time.

Garret Graves:

And so I remember Hurricane Katrina at home was one of those unifying events. And I remember September 11th was one of those unifying events. And so I've remained hopeful that one of two things would happen. One would be that there would be some type of unifying event nationally, where people would come together and say, "Look, we really do have to put the country first." And so that's one thing.
And the other is that voters begin demanding or holding people accountable to actually getting things done, not press releases, verbal bombs, things along those lines. And I think that the current reward mechanism in the public is unfortunately rewarding the more bombastic or provocative behavior.

Rob Stavins:
I love the idea that you described of bringing other members down to your district, presumably ones from other parts of the country. And perhaps, I hope, from across the aisle.

Garret Graves:
Absolutely.

Rob Stavins:
Has that been effective? What's that been like?

Garret Graves:
It's been great. It has. It's been fantastic. I'll give you an example. Congressman Jared Huffman from California represents Marin County. Most members of Congress are one or two committees. We ended up being on three for a lot of different reasons. But he's on the same three. He and I, we can't avoid each other. Our constituency, south Louisiana, San Francisco area, you couldn't be any more different. But we've traveled with one another and he's come down. We're still working on another opportunity for me to go back up to California to go visit with him. We go to dinner together. Personally, I really like him. Ideologically, we have very different views and our constituents that we represent, but it's an example.

Garret Graves:
Congressman Alan Lowenthal from California, a little bit further south, Long Beach area. Congressman Jimmy Panetta. I don't know why I'm on this California trend, but another one who's come down. Yeah, we've had a lot of bipartisan members that come down and it has been amazing because you start recognizing people, again, first for humans and then maybe for ideology or what have you, second. But also I think, beginning to understand or have respect for the fact that you're representing people. And you may not agree with those people's views, but you're representing people.

Rob Stavins:
Yeah. It would be hard to picture parts of the country in terms of the constituencies on lots of different dimensions that are more different than your district and Marin County. Has it gone the reverse way? Have you gone to Marin or perhaps to Massachusetts?

Garret Graves:
I haven't been to Massachusetts on an exchange. But I will tell you that former Congressman Joe Kennedy and I are good friends. In fact, I was just texting with him last week. He sent me birthday wishes recently. We stay in touch a good bit. And so I am friends with him. But I haven't been to Massachusetts. I absolutely have gone back and forth to other districts, both sides of the aisle. I visited with Democrat members in California a good bit. I've been to Virginia, North Carolina visiting other members, Alabama, Washington state. I've tried to do it a bit engaging folks. And I do think that things along those lines, put on steroids or scaled up a good bit would be helpful.
Rob Stavins:
Yeah. I want to turn now to climate change and to your involvement in the issue. As I do, I want to-

Garret Graves:
It's one of those easy issues.

Rob Stavins:
... Yeah. An easy issue. Exactly. I want to remind all of our viewers and listeners that we're taking your questions. Some of you have already submitted questions in the queue, and I'll go to those very soon. But feel free to submit more questions that you have for the Congressman. Climate change is indeed a difficult issue, both because of the global commons nature of the problem, for any individual district, even for an individual country, you incur the costs of the actions, but the benefits are spread globally, which means that the benefits locally are probably going to be smaller than the cost locally. That's the reality of global commons problem.

Rob Stavins:
And then we have this intertemporal asymmetry that the greatest benefits of taking action now are going to be off in the future. Which is asking elected officials to do exactly the opposite of what the instinct is, which is to give benefits to voters today. Someone who I used to work with when he was in the Senate, Tim Wirth, a Democrat from Colorado. He said long ago that because of that, he viewed climate change as the most difficult political issue one could even come up with. Let me ask you about that. Back in January, when you and I were on that session together, panelists on that session, the session had a striking title, which was Decarbonizing the Global Economy, Balancing Economic Efficiency and Political Feasibility. Congressman, is it possible to address climate change while balancing economic concerns and political feasibility?

Garret Graves:
Yeah. As we work to bring members of Congress together and chart a new bipartisan future, I'm glad we chose an easy issue to tackle first. Look, the answer is yes, I think so. And so let me give some good news or momentum on this issue. Years ago, if you brought up the term climate change, global warming, what have you, in a bipartisan crowd, you would probably have Democrats run one corner, Republicans run to the other. And you would have a really divisive or very partisan room happen. And I think over the last few years, especially over maybe the last four years, you've seen a pretty rapid evolution. And I'll explain.

Garret Graves:
I think even today, if you bring up climate change, global warming, what have you, you're going to have pretty different views among Democrats and Republicans. However, we found that if you begin slicing it up into different components, so I'll say it for a temp time, south Louisiana, a state that really doesn't have a lot of margin of error in regard to sea rise. And we also, compounding the problem, have some of the fastest subsidence rates or settling sinking rates in the world. And so this is a critical issue for us at home in Louisiana.

Garret Graves:
And so one of the first things we've done is we've talked about the adaptation or resilience strategies. And I can be in a room among very liberal folks and I can talk about the protection of communities, the resilience of ecosystems, and it resonates. Absolutely. I can be in rooms with conservative folks and I can be talking about how we've funded these disasters over and over again. And that financially, and there are all sorts of studies, reports from Congressional Budget Office, Corps of Engineers, FEMA, and others that have clearly shown that making investments on the front end in resilience or hazard mitigation, it more than pays for itself in the longer term. And so there's a great fiscal conservative argument.

Garret Graves:
Taking another step. You can talk about things like efficiency and conservation. For example, if we're looking at strategies to reduce emissions or energy consumption. Maybe if I'm in a room among liberals, I will talk about how, "Hey, if we do this, this, and this, it's going to actually reduce emissions and maybe help to diversify our portfolio of energy sources." If I'm in a Republican or a conservative room, I may talk about it differently. "Hey, do you remember when the tax bill was done in 2017 and it was all about improving US competitiveness? Well, we have these technologies and they're going to help to reduce energy consumption and help to improve the resiliency of the grid by spreading energy generation among different types of sources."

Garret Graves:
And so, look, I'm talking about the same thing, but I'm just using terms that I think really resonate with different ideology, better than others. And so we have made some progress by splitting it up into bite size pieces, but I don't want to paint an overly optimistic picture. And then I think more recently, this issue, unfortunately, has become a bit more emotional than it's become scientific or data driven. And I, for one, and other people are much better at this than I am, but I, for one, really struggle with how to discuss, find consensus whenever this has become such an emotional issue. I find myself driven more by data.

Rob Stavins:
It's interesting, we have a question which ties in with what you were just saying, and also goes back to the discussion about political polarization in general. And the question is, has the public or your constituents become similarly polarized on issues like the environment? Would the backlash from crossing party lines on environmental legislation come just from other members of Congress and party leadership, or also from constituents? Or alternatively, would they support, or perhaps being indifferent to that kind of decision?

Garret Graves:
Yeah. It’s a great question. And I’ll go back to, and reemphasize something I mentioned earlier. I think that the reward system, and you can consider reward anything you want, likes on social media, retweets, you can look at it like small dollar contributions, and go back and look at some of this stuff, because you'll see how this plays out. You can look at air time on partisan news venues. And the reward system, the ones that I just mentioned, those often reward the more provocative or bombastic. And so what we've tried to do, and I do, I want to brag our team here in our Washington office, our legislative team here, just amazing folks. We got ranked, I think it was the fourth or fifth most successful office in our party in delivering legislation.
So yes, I will go into town hall meetings and Facebook Lives and other venues where I will just get absolutely roasted for maybe doing things or saying things that might have been a bit more bipartisan. But we've been... well, I don't want to say overly successful. We've had some success in being able to explain to folks, "Hey, look, I understand. You give me 10, 12 seconds, I can't explain it to you. If you can give me two minutes, let me walk through this." And just explaining, "Hey look, because we did this, this and this, we were able to work with these folks. And we were able to get this, this, this, and this done for home, improving the life in south Louisiana." Or making a policy change that just makes an awful lot of sense.

Garret Graves:
And so look, I think people at home are way more influenced by social media and other media venues than they are one member of Congress out there talking. But in more intimate settings, where we've been, maybe people coming at us kind of hot, we've been able to go through and explain a little bit about how... just rationalize or explain how you can get things done sometimes by thinking a little bit longer game.

Rob Stavins:
Here's an interesting suggestion from someone. Again, on polarization, but tying it in with climate change. And that is the premise of the comment is that he says that climate change is something that Democrats seem to be passionate about, and historically. And then the military and national defense is something that Republicans have been. Is there a possibility of some common ground by looking at the implications, for example, of climate change on activities coming out of the Pentagon?

Garret Graves:
Yeah, yeah. It's a great thought. How do we find some of these common denominators that we can pull together? Unfortunately what happened a few years ago, there was an amendment that was directing the Department of Defense to effectively analyze their weapons systems and their equipment under different temperature scenarios, anticipating rising temperatures. And that amendment became a partisan fight. And look, I'm looking at them, I'm like, wait a minute. Even if, let's say that they're wrong and the temperatures aren't going to rise to X degree, as some are predicting, this is a resilience issue. This is about performance of the military under different conditions. And maybe temperatures won't rise like that, but let's keep in mind that in many cases, our folks are training in the United States, they may be thrown in The Middle East where you're going to have drier climates, you're going to have warmer temperatures. And I think it absolutely makes sense for the resilience of our ability to perform, to look at that.

Garret Graves:
Unfortunately that one became a partisan fight, but I love those types of ideas that I brought up earlier. The concept of how we can do an analogy between the tax bill that was done under the Trump Administration that was designed to improve the competitiveness of US workforce by bringing our taxes in line with other countries. And then also explaining, "Hey, we have another competitive idea. We're going to use these technologies, which help to reduce energy consumption, and as I mentioned, do more diverse generation of energy. Some solar and wind in addition to nuclear, gas fired, and what have you, and that's going to improve the resilience of our grid or of our electrical system." And so I think that bringing ideas like that together, that's how we're going to continue to build and make progress.
Rob Stavins:

Now, thinking about specific approaches to climate change policy, many economists, and many of the policy wonks around the Beltway, including at the Bipartisan Policy Center, which you mentioned earlier, they seem to think that carbon pricing, either carbon taxes or carbon cap and trade systems, would be a necessary element of government policy to seriously reduce US CO2 emissions. And not just US, but in any large complex economy. What's your reaction to that Congressman?

Garret Graves:

Let's look at it and look, I'm in over my skis on this one to some degree, just, I'm not an economist. Give me some wiggle room here. Number one, I think if you are trying to come in and reduce consumption or make people think about it, no doubt. I mean, that putting pricing on something is a very effective tool to come in and make folks think about, or force how things can become more efficient. Where you run into problems, and where I've got pretty significant problems, is when you look at international applicability and how effectively you translate carbon pricing among different countries, among different economies.

Garret Graves:

Let me throw out some examples. One, you've had China say, "Oh, look, we've effectively stopped releasing HFCs." Well, then we have satellite technology that's zooming on these concentrations of emissions coming out of China. Well, so you've got an accountability or a transparency issue that I think folks would be very skeptical of. Meaning, well China's saying that their economy is X. And so we're going to have a carbon pricing at this to translate their economy coming in, finding out only later, well, wait a minute. How do you do that? Then you start thinking about the complexity of every single product. How do you translate, or how do you establish exchanges on every single product? Or maybe it's made in this factory that does it more efficiently than this factory does. And so just the complexity, the international translation gets very concerning.

Garret Graves:

But look, let me just maybe take my own question on this one, kind of, Professor, if that's okay? Look, I know that folks are very concerned and I'm concerned. Again, we don't have margin on sea rise in Louisiana. We're going under water. We've lost 2000 square miles of our coast, a lot more complex than just sea rise and subsidence. But 2000 square miles, that's wiping Rhode Island off the map. So this is a huge, very personal issue for us in south Louisiana. But I think one way to address this and build more momentum. I talked about that adaptation. I talked about this efficiency, conservation type concept. Look, the United States, over a long period of time, we were reducing emissions more than the next 12 countries combined. In more recent years, up until 2020, I think going back to around 2005 or so, we've reduced emissions more than the next seven emissions reducing countries combined.

Garret Graves:

And so one thing that I like to tell conservatives is that, "Hey, look, I'm not asking you to come in and make a 180 necessarily. What I'm asking you to do is let's go back and look at some of the strategies that have been taken in the United States that have resulted in us leading the world in reducing emissions. And making sure that we're doubling and tripling down on some of those strategies." And I'll tell you, really warm reception whenever I say that in conservative circles. I think one of the biggest problems that we've had, and this is one of the things, Professor, that you and I discussed in the January forum, is
that... look, put yourself in the perspective of a CEO or an investor. You want to make an investment in big companies, large investments. You want long term certainty in your investment.

Garret Graves:
Well, look at what's happened in just the last several years in the United States. We've gone from an Obama Administration who had climate issues and environmental issues over here, really high priorities. Then we have Trump come in, who took a very, very different perspective, and he's got his policies over here. Well, then you've got Biden and he's swinging it back over in this direction. You're an investor you're looking for predictability and certainty. You're looking for areas to invest in technology, and you've got all of this crazy pendulum swinging or uncertainty. I think one of the ways we've got to look at devising strategies that are going to have the durability of different administrations or political winds, are things that make sense. And you're like, "Yeah, well, that's the dumbest thing I've ever heard anybody say. Of course, do things that make sense."

Garret Graves:
But what I mean by that is things that have... we talk all the time about environmental sustainability, right? We talk about environmental sustainability. Let's also think about economic sustainability, aligning the economics. I'll give you an example. One of the things that we've done is we did a tax incentive called 45Q and it is a tax incentive for sequestration. And so we have now created a tax incentive for folks to look at sequestration of greenhouse gases. We recently had the largest sequestration project in the world, announced in south Louisiana. In the world. And so I think that that's an example of where we can find solutions, technological solutions. And look, I don't want to pretend that, oh, this is the silver bullet that's going to do everything. But the silver bullet solution... I'm sorry. It's aligning environmental sustainability with economic sustainability. Because you can chart the economics on it over a longer period of time and you can make an investment more certain or give you more predictability on it. And I think that makes a lot of sense.

Garret Graves:
A second example is, look, we've got all of these different technologies. We've got wind and solar and wave and geothermal and nuclear. And we do have coal and gas and other fuels. Where does it make the most sense to use those, to apply those? What is the best mix of your energy portfolio to have the best outcomes? We've seen things awful in Ukraine and in Europe right now. We've seen awful outcomes, candidly, in California and in the freeze in Texas. Helping people better understand, I've got all these tools, wind and solar and all these other things, help me understand how to best use them and how we mix them together.

Garret Graves:
In a previous life, I rebuilt the levies after Hurricane Katrina, rebuilt our coastal wetlands there as well. That was my job in south Louisiana. And so I had tools available. It was elevation of homes. It was buyouts of communities that weren't saveable or sustainable. It was building things like levies, flood walls. It was doing strategic barrier island restoration. We had all these tools available to us. But I got to be honest with you. I'm looking at them, I'm like, how in the world do I use these? When do I use a wrench versus a screwdriver versus a hammer? When do I pull out my socket set? So we ended up developing models that was able to quantify the performance of different portfolios of projects and looking at them under things like different sea rise scenarios or hurricane intensity scenarios and things along those lines. And I think we've got to do a better job now, helping decision makers know where,
how to most effectively use the tools available to where you get affordable energy and access to energy, to where you get more resilient performance and you get lower emissions over the long term.

Rob Stavins:
Now, I'm sure you're aware of this, but probably not all of our viewers and listeners are, particularly those from other countries. So let me just take note of the fact that that decrease in US emissions, and US emissions have been stable, sometimes declining over recent years. Greenhouse gas emissions, that, to a large part, they're not due specifically to public policies, but they're due to the fact of so-called unconventional natural gas from fracking, bringing down the price of natural gas and a lot of substitution of gas for coal in many parts of the country for electricity generation. And then also increasing energy efficiency, not necessarily because of policies, but because of the fact energy comes at a cost. So there's an incentive for consumers and producers of energy consuming durable goods to make them more efficient. And that's all good news.

Rob Stavins:
But I want to turn to a question that's come in, which may be from one of your constituents. But it goes back to something you talked about earlier. And here's the question, she says, "Hello, Congressman. Coming from the area with the highest rate of subsidence in the world, how do you handle, not just politically, but personally, the incapacity of Congress to pass serious bills on mitigating climate change?" I think she's asking for your personal reaction to the situation.

Garret Graves:
Sure, sure. Look, this opens up a Pandora's box to some degree. We can sit here, and Professor, you're exactly right, in regard to some of the drivers of the emissions reduction success in the United States, which I do want to connect that back to my comment about economic sustainability. We've tried to influence or manipulate markets with subsidies. And the power of the market is really just, it's so massive that some of the manipulation of market through subsidies hasn't worked. So we've got to find manipulations that can be more compatible or complimentary.

Garret Graves:
But let me go back to the question. I'll tell you something, that you, Professor, addressed in the opening. You talked about how investments we make in the United States, or we make locally, may not have the return on investment that is seen in the short period of time. And I remind you, in the House of Representatives, we run every two years. And so often time people are looking at that immediate return on investment.

Garret Graves:
Secondly, you noted that it's spread across the entire globe. Well, here's a fact, for every one ton of emissions we've reduced in the United States, China has increased by four, by four over the same period of time. And so it's that whole thing about just looking and you're sitting here trying to bail the boat with a cup when you've got waves pouring over your bow and you're not making any progress at all. And so to answer the question, look, what's frustrating to me has been that we have seen globally, I think, just very unequal approaches or urgency here. And please don't walk away with me suggesting the United States has necessarily been the best country in the world on this. I wouldn't give us that rating. But it's been frustrating because we have spent a lot of money on strategies to reduce emissions. And if we're in the situation with, for every one time we're reducing, China increases by four under their commitment
under the Paris Accords, they get to double their emissions between now and 2050. And they're already releasing more than the United States and European Union and other developed countries combined.

Garret Graves:
And so I'm going to go back to what I said before, because please, I'm not just throwing in the towel and saying, we can't do this. It's why I think we've got to do a better job incorporating environmental sustainability related to emissions reduction strategies and new technologies with economic sustainability. We've tried to overpower the market, I think, with some of our subsidies. I'm going to be wrong on this number, but we started doing subsidies on wind, for example, and solar, back in the 1980s. And I think when you add it all up, we've done well, over $100 billion in subsidies. And what is it? Solar penetration's like 2.3% right now.

Garret Graves:
But look, I've got solar technology at my house, I've got electric vehicles. I built a solar generation charging for just playing around with different ideas. And so, I love the technology, but, well, you got to be honest, it's so just ridiculously expensive to do what I did. I just wanted to try it and see how much of a cost. We've got to do a better job aligning the best opportunities for those tools, the whole screwdriver wrench thing that I brought up before. Because I do think that we can better utilize some of the tools we have available. Also, I remind you, we have the largest energy R&D budget in the world in the United States. So let's do a better job making strategic investments. I think we've seen way too many stove pipe type projects or investments without thinking about how can we be moving in a direction that truly is going to achieve that economic sustainability box that we need to check moving forward. But I do think that you've seen a lot more global dialogue in recent years than you've seen previously. And I do think that we're going to be able to continue building on some of the success or momentum we've had recently. But developing nations is absolutely critical to our overall success here.

Rob Stavins:
Well, that's certainly true. In terms of those subsidies, although economists like myself are generally not supportive of subsidies, because the subsidy goes to everyone, whether or not they were going to take action anyway. So it's extremely costly for government considering what's accomplished. Having said that, the evidence is, is that at least the subsidies that existed for a while on wind penetration actually did have an effect. But the reason we're seeing a tremendous increase in terms of solar penetration is because of technological change. That the cost from the market, the cost of solar panels has just fallen tremendously. It's something like 20% of what the cost was not very many years ago. That leads to a question that's come in thinking about government, but also thinking about individual entrepreneurs. And this question is as follows, in these days of big government, is there any role for small innovative businesses in our climate change efforts?

Garret Graves:
The more that I've studied this, and I've met with folks, the more I have become absolutely convinced that that is exactly where this problem is going to be solved. We're going to innovate our way out of this. We're going to do it through these disruptors, through people that come up with just great technological ideas. And a quick little antidote, Michael Dubin, who started Dollar Shave Club. I've become friends with him and just talked to him. I was like, "Hey, how did all this come about?" And he started telling me a story about how he came upon all these razor blades and he had two companies that had monopolized the market. He was telling me about the disruption strategy. And it was awesome
because you effectively had artificially high prices because a large monopoly on shaving equipment. And he came in and he had really inexpensive equipment that he was able to unload. And it just, it was this huge disruption.

Garret Graves:
And so I think innovators have the opportunity to come in and completely disrupt, because as Professor Stavins said earlier, some of the successes we have in the United States were driven by economic decisions. Oh, wow. We can do this with gas cheaper than we can do it with coal or whatever else they were firing with before. And so as we innovate, as we build better technology on energy storage, which is so critical. And Professor Stavins talked about the price of solar coming now, but you know what also has improved, is actually the efficiency of the panels have significantly improved as well. And so I remain just absolutely confident and optimistic that these small innovators are going to be the ones that drive us.

Garret Graves:
Now, going back to what I said before, look, I know it's really expensive for y'all to all this R&D work. I'll say it again, we have the largest R&D budget in the world, I don't think... And I've gone out and visited our national labs, and they're doing some amazing things, NREL out in Colorado and others, just incredible things. But I don't feel like we've necessarily been as strategic with our investments. What are some of the innovators in the United States doing? And what are some of the resources that we have stateside that we can build renewable energy technology or clean energy future upon, in a way that will allow us to protect our supply chain? We've seen, based on what's going on in Ukraine and Russia right now, what happens when we don't have better protection of supply chain? And so I think those are some of the things we need to be thinking about is making strategic investments through our energy R&D efforts to really capitalize on US based or allied based resources and opportunities to help with the stability of supply chain and the ability to actually deliver on newer cleaner technologies.

Rob Stavins:
And turning back for a moment to the political polarization and the difficulties in Congress. Someone from our audience has written that, "I agree there are places where there is potentially collaboration between parties, but it doesn't seem to be happening. At least not robustly at the federal level. I grew up in a rural area. And the folks out there..." presumably when she goes home for visits, "... are simply not interested in government solutions." Is that a fair characterization? And whether or not it is, how do you approach this particular challenge?

Garret Graves:
Yeah, I've come to realize, and I didn't realize how powerful that was. As we were talking earlier about members of Congress from different parties and areas of the countries visiting one another. Look, we represent a lot of more rural areas. And you go out to these areas, I mean, we have people that live literally in places, the only way to get there is by boat. And just some of the most fiercely independent people that you've ever met. And so you can imagine people like that, it's 100% pull themselves up by their bootstraps. They don't ever or think about government or other folks coming in to actually do things. Meanwhile, you may take, and let's pick on New York City for a minute, a city that has just these really dense populations. If you were to go put a crosswalk with a little flashing light on when you can walk and when you can't, out rural America and you put signs up and say, "You have to cross the crosswalk." People would be looking, going, "What in the world is this? We have a car that passes once
every 10 minutes and I've got to walk a mile down and go to the crosswalk when the sign turns white, that's crazy." Whereas in New York, you've got to have it. You've got to have that government intervention or regulation or structure.

Garret Graves:
And so there is a huge perspective difference around the country. And I do think that, in more liberal areas, generally speaking, painting with a broad brush, folks do believe that government needs to step in and play a role. And of course, in some of these more remote areas, if folks are saying, "No, we're going to do this ourselves. We're going to innovate or work ourselves out of this problem." You are absolutely right and that's probably one of the biggest translation problems in the Congress.

Rob Stavins:
I want to bring us to a close with one final question that's come up a few times. And that is, is that, I'm sure you're aware, Congressman, of these grassroots youth activism on climate change. That was quite prominent in 2019, went into hiatus during the pandemic, came back again in both Europe and the United States. And I'm sure you observe it in your district. You probably observe it with your children. And what I'm wondering is, there are two possibilities. One is that this is an age effect. And as they get older, those people, they'll become more conservative. As many people do as they become older. And they won't be so exercised about climate change. Or whether it's a cohort effect, and they're going to carry this through. And that the people who are your age, 30 years from now, your views will be much more common. They're going to be a lot of people concerned about climate change. I'm wondering what's your reaction to the youth activism.? And do you think they're going to carry it forward as they become older and they become voters and they become members of congress?

Garret Graves:
One, no question, youth activists have had a much louder voice, they've been much more participatory in issues like climate. And I think it has forced a lot of folks that previously may have denied climate change or refused to acknowledge the issue, it's thrust this up on center stage. And the perspective, it goes back to what you said at the beginning, right? If the benefits are received decades later or years later, what have you, that's the generation that's going to receive the benefits and they're looking long game, they're playing long game. I think that it is going to have a permanent impact is probably the best way that I'd say it. I think that their participation, their activism on the issue is going to have a permanent issue.

Garret Graves:
This no longer is an issue that political parties can deny. You saw Republican Leader Kevin McCarthy over the past few years has released a number of different bill packages on energy, environment and climate issues. He's actually created a task force within the Republican Conference where he wants to develop an entire agenda on energy and climate issues moving forward and be able to campaign on that for this election cycle. And so I think that that really shows the staying power or durability by this spark that may have been set by some of the youth. And so I do think it's going to have long term implications that I think you're going to continue to see growth in this issue among political parties.

Rob Stavins:
Well, we're going to have to bring it to a close there. Thank you very much, Congressman Graves for having taken time to join us today. At least from my perspective, this was great.
Garret Graves:
I enjoyed it as well. Thank you. And look, if there's any follow up from anybody watching, please reach out to our office and happy to follow up on anything and love to hear y'all's ideas. This is a huge problem that we have to deal with, and certainly going to need all the big brains we can thinking and figuring out solutions, political and scientific.

Rob Stavins:
Thank you again, Congressman Graves. Our guest today has been Congressman Garret Graves. He's the Republican member of the US House of Representatives from Louisiana's Sixth Congressional District and the ranking member of the Select Committee on the Climate Crisis. I hope you'll join us again for our next episode of Conversations from the Harvard Project on Climate Agreements. We will announce our guest shortly. Remember, you need to register separately for each webinar via Zoom. And if you want to watch the video of today's session, that'll be available shortly. Finally, I'm your host, Rob Stavins, thanks for joining us.