D.D. Guttenplan[00:00:00]Welcome, everyone. I’m going to begin by saying something that Nation editors don’t get to say very often which is, but first a word from our sponsor. This conversation today is brought to you by Domini Impact Investments. Domini believes the investments we make today will shape the world we live in tomorrow.

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[00:00:54]Today, I am thrilled both to meet Bill McKibben virtually and to introduce this award-winning author and activist. Bill is the Schumann Distinguished Scholar at Middlebury College, and he’s been eloquently and intelligently sounding the alarm on climate change for a long time. How long? Well, his classic work, The End of Nature, was published in 1989, and that was the first book for a general audience ever written about what was then called global warming. It has since appeared in 24 languages.

[00:01:28]I’m going to tell you a little personal story about why I am so thrilled to meet Bill McKibben, somebody I’ve been reading and hearing about for years. In the 1980s, I was a senior editor at The Village Voice in New York City. The editor of that paper called me into his office one day and he said, You know, I think we ought to do something more about the environment. I think we ought to pay more attention to environmental issues in the paper. In fact, what I answered then was, David, The Voice is a New York newspaper. By definition, the people who read it, who live in New York are indifferent to their environment, or they wouldn’t live in a big city. Reading The End of Nature was what changed my mind.

[00:01:58]At the time, The Voice was interested in urban politics and anti-imperialism and identity politics. We weren’t hostile to environmental politics but didn’t really feel like it had anything to do with us. In fact, what I answered then was, David, The Voice is a New York newspaper. By definition, the people who read it, who live in New York are indifferent to their environment, or they wouldn’t live in a big city. Reading The End of Nature was what changed my mind.

[00:02:30]So, I want to thank you, Bill, for opening my mind and the minds of millions of other people to the fact that the environment is something that concerns all of us. Climate change (which was, in the 1980s, perhaps describable as a cloud no bigger than a man’s hand) has now come to dominate our world and our environment and our long-term concerns. Although we gather here in the shade of immediate emergency, it is an emergency that some Nation writers have called a dress rehearsal for climate change. We’ll get to that.
McKibben, as you’re about to find out, is a fantastic public speaker and the founder of 350.org, the first planet-wide grassroots climate change movement which has organized more than 20,000 rallies around the world, spearheaded resistance to the Keystone Pipeline, and launching the fast-growing fossil fuel divestment movement, which has given hope to so many people concerned about the planet's future.

I'm going to ask a climate and COVID question in a second, Bill, but first, I can't help noticing that your surroundings are different from everybody else's, at least on the panel. Maybe you could tell us a little bit about where you're coming from and why.

Bill McKibben Absolutely. Well, first of all, it's very, very good to be with everybody and to get to see everybody on the chat sounding in from around the planet, and hello to everyone. The only people who told me in advance that they were going to be watching were my old friends Gloria Loomis and Walter Bernstein on Central Park West. So hello to you all, too.

Look, I'm sitting in the front seat of my electric vehicle in a parking lot. One of the issues we might want to get to someday in this country is the fact that rural America has terrible internet. If people who live in rural America want to do things like we're doing today, they often end up doing what I did, which was driving my electric vehicle a couple of miles to a parking lot where some broadband leaks through, thanks to Middlebury College.

For those of you who know Vermont, I'm in the parking lot at Bread Loaf upon the spine of the Greens. In fact, let's see if this will work. I'll just turn it around and see if you can see the beautiful Green Mountains out the window at all.

Spring is coming very slowly to Vermont this year. There's still a little snow in the forecast for this week. That said, we just learned that April was the warmest April ever on planet Earth, and there's about a 75 percent chance that 2020 will be the warmest year we've ever measured on this planet. That's especially notable because there's no El Niño going on, which is the thing that's always propelled our record years in the past. It's a good reminder that just because one crisis starts doesn't mean that another one stops.

We're in the middle of great dramas on our Earth, and I do think it's possible that there are some things we might be learning from this episode that'll give us some hints about what we might want to think about going forward.

Well, that's exactly what I want to ask you about. As I said before, we've described the COVID-19 pandemic in our pages as a kind of a dress rehearsal for climate change, meaning that it shows us how much we're all connected to each other. Also, it reveals the-
not holes in our safety net, that would be to pretend that we had a safety net. I wonder what your thoughts are about that; whether this is a dress rehearsal or whether this is in some ways even more serious than that.

**Bill McKibben [00:06:43]** This is super real and there is no silver lining to it. We’re in a horrible, horrible pandemic that is, of course, made endlessly worst by the fact that we’re blessed with our current inept leadership in this country. I think that, though there are no silver linings, one might as well try to learn something if one’s going to go through this level of trauma.

[00:07:11] It seems to me that there are probably three things chief in my mind that we might want to take away. First is, look—physical reality is real. Now, that sounds like a trite, obvious, and clichéed thing to say, but we live in a world of screens where we're used to manipulating things. It’s easy to forget that we don’t set the rules.

[00:07:44] I’ve spent 30 years trying to explain to people that physics and chemistry don’t negotiate and won’t compromise. It doesn’t matter what you want from them; they set the terms that the carbon dioxide molecule is not like other political forces that we’re used to dealing with.

[00:08:05] This episode is reminding us that the same holds true for biology. It doesn’t make any difference whether you get up at the presidential podium and say that it’s a hoax or it’s going to go away by Easter, the cases are going to drop to zero or something. It doesn’t matter. The microbe is setting the rules. If it says stand six feet apart, then stand six feet apart. That’s how it works. So, that basic bottom line lesson is, I think, something that we’re internalizing in ways that we haven’t in our generations quite before.

[00:08:45] The second thing—and it’s a corollary to that—is speed is essential. We’ve started to understand that countries that flattened the coronavirus curve early are doing really well. The US and South Korea had their first cases of this disease on the same day in January. The South Koreans went right to work. They disrupted things. They said, We’re not going to have big gatherings, and we’re going to test everybody all the time. As a result, they’re now looking at this thing in the rearview mirror. As of this morning’s paper, there have been three days without a single case in a country of 51 million people.

[00:09:30] We did just the opposite. We didn’t do a damn thing. We waited six weeks and in that time, the problem got bigger and bigger. Now, we’re not looking at it in the rearview mirror. It keeps crashing through the front windshield of the car, to use a metaphor that’s all around me.

[00:09:50] The same lesson goes, of course, for climate change. Speed is everything. If we’d started flattening the carbon curve 30 years ago when scientists told us to with things that would have
been moderate– not even that modestly disruptive(a price on carbon, that kind of thing) we’d be in a completely different place now.

[00:10:15] I hear people are having trouble hearing me, so I’m going to get a little closer to this thing and see if that helps.

[00:10:20] We’d be in a completely different place than we are now. We didn’t; we didn’t put the accelerator down, instead. We’ve admitted more CO2 in the atmosphere since 1990 than in all of human history before. As a result, we’re now where we are.

[00:10:45] It’s easy to forget, given that we’re all concentrated on the pandemic, but this year began 12-14 weeks ago as we all watched in horror as the continent of Australia essentially burned to the ground. We’ve lost half the summer sea ice in the Arctic. Now, we still need to move very, very fast—in fact, faster than we can even start to imagine—but we’re going to have to be fairly disruptive as we do it. We’re going to need things like the Green New Deal, and there is still going to be a big toll. No matter what we do now, we’re going to pay a heavy price, but speed remains of the essence.

[00:11:00] So those are the first two lessons. They’re about physical reality. The third one that just strikes me as the most basic is social solidarity really matters. It’s a matter of life and death. I’ve lived most of my political life in the shadow of Ronald Reagan and in the notion that markets were going to solve problems, that the most important thing for each of us to do is pursue our own self-interest and things would work out.

[00:12:00] Reagan’s most famous line always was, "The nine most terrifying words in the English language are: I’m from the Government, and I’m here to help." You know, ha ha ha. It turns out that the scariest words in the English language are, We’ve run out of ventilators. The hillside behind your house is caught on fire. Those are not problems that you solve by yourself. Those are problems that you solve when you come together to solve problems. And that’s what we’re going to have to be doing now.

[00:12:32] Government is just a name we give for when we come together to try and do things together. It’s very clear that the conservative movement set out to make government so small, as they put it, that you could drown it in a bathtub. If you drown your government, then it’s not there to help when you desperately need it. We obviously desperately need it now.

[00:13:05] Sorry, I’m gonna turn it over to Aaron in a minute with some audience questions, but I want to just pursue one thing you said, which is you talked about the fact that there’s going to be a toll to pay regardless of how fast we move now, and I wondered—this is about climate, but I think
one of the things we've seen from the pandemic is that the people who pay the price are not always the people who make the decisions. So, I wondered if you could talk a bit about climate and that toll, and who is going to have to pay it.

Bill McKibben [00:13:42] Well, look. The iron law of climate change is the less you did to cause it, the sooner and the harder you get hit by it. That turns out to be, it appears, the same general truth about the pandemic. We're beginning to see what kind of communities get hit the hardest, and New York is a perfect example. People have done a good job of tracking which zip codes are most wrecked by the coronavirus. Maps like that can be drawn around climate change, too.

[00:14:16] Eventually, any of these problems get so large that they overwhelm all our defenses, so people in rich parts of California get chased out of their homes by fires, people in lower Manhattan watch Hurricane Sandy wash through, on and on and on.

[00:14:38] But, no question, the people who pay the biggest price are the people closest to the edge and that price will continue to grow. The UN estimates that by mid-century, on current trajectories, we may well be seeing as many as a billion climate refugees on this planet. Think about that for a minute.

[00:15:02] I mean, it took a million refugees coming into Europe from the Syrian civil war, itself caused in part by a deep and vicious drought to completely discombobulate the politics of a whole continent. Multiply that by 1000, and try to imagine what kind of world we're creating.

[00:15:25] So, it is super important right now to figure out, at the very least, how to slow down and limit the degree to which the planet warms. Stopping climate change is no longer on the menu of options. We've already raised the temperature of the Earth one degree Celsius, and that's having big effects. Even if we do everything right from this point on, the temperature is going to go up pretty close to two degrees, and that's going to be much, much, much worse than what we're seeing now. But the trajectories, at the moment, bring the temperature up three or four degrees Celsius. If we do that, then I think it's pretty clear there's no chance of having civilizations like the ones we're used to.

[00:16:05] The time we have to make the changes we need to make is pretty short. The Intergovernmental Panel on Climate Change in October of 2018 issued their most recent report, and it gave the most detailed sense of a timeline. They said that by 2030, we need to have a fundamental transformation of our energy system, such that our carbon emissions drop by about half if we wanted to have any hope of meeting the goals that we'd set in Paris in 2015. Those goals are not particularly ambitious; they imagine a planet much worse than the one we live on now, but even to meet those, we need fundamental transformation fast.
One imagines that coming out of this pandemic crisis we're in may be one of the last chances we really get to start reorienting things on a big scale. We can see some signs of that in some places around the planet. The Germans and the South Koreans seem to be taking the Green New Deal as a template for how they're going to be managing their economic recovery. We, of course, should be doing the same thing.

We're going to be in a world that needs a lot of jobs and, happily, we have work that requires a lot of hands that needs doing. Solar panels and wind turbines aren't going to erect themselves. Your house won't insulate itself by magic. That needs people doing that kind of work. Just as we came out of the last great economic crisis that our planet faced in the 1930s with a New Deal, it's pretty clear this is where we should be going now. Obviously, that's not going to happen in our country before November, which is one of the reasons that this November becomes more important all the time.

D.D. Guttenplan [00:18:07] Okay. Erin, do you want to ask some questions from our wonderful (I was going to say studio audience) global audience?

Erin O'Mara [00:18:17] Yes, absolutely. I wonder if maybe we could start with some basics. There are some questions about your organization, 350.org. I wonder if you can explain a little bit about how it's working and if you're taking strides you're taking. Howard Lazzerini wonders if you could explain how it's operating and if you guys work with the Sierra Club. There's also been some conversation about the name—have we already missed the 350 marks?

Bill McKibben [00:18:53] Oh, we missed the 350 marks when we started it. 350.org was the first iteration of a kind of global climate movement. It began in 2008, and it took its name. In fact, I asked Jim Hanson, our greatest NASA climate scientist who worked on the Upper West Side for decades and from there, helped the world to understand the peril that faced. I said to Jim, We need a number. And he said, I've been thinking the same thing, so his team went to work.

In 2008, at the American Geophysical Union in San Francisco, they published a paper saying 350 parts per million CO2 is the most you could safely have in the atmosphere. It's a very sad number because we were already way past it. By then, we were at 375 or 380. We're at 417 parts per million or so today. That's why the Arctic is melting. That's why California catches on fire. On and on and on.

We took the name and, of course, we can't change it. I mean, it's not like if you go to the doctor, and the doctor measures your cholesterol and it's at 300, then the doctor just resets the
safe level for cholesterol. That's not how it works. Back to my original point, physical reality matters here. So, that's where the name comes from.

[00:20:32] Now, I’m just a volunteer at 350 and always have been, but I do my best to help out and it has grown into a large thing that works all over the world. We’ve organized rallies and things in every country on the planet except North Korea, and now there are lots and lots of 350 chapters all over the world that really have no formal connection with the organization.

[00:21:00] Our strategy from the beginning has always been to sort of try and build coalitions and get everybody working together. So, it has been enormous fun to watch over the last few years as this movement has just swelled and swelled. We saw the Sunrise Movement arise. It was mostly young people who’d worked on-campus for fossil fuel divestment and when they got out of school, they formed this Sunrise Movement and started working on the Green New Deal and rounding up AOC and so on to support. It’s been really fun to see all these very young people doing that work.

[00:21:40] It’s been great to watch Extinction Rebellion rise in the UK and elsewhere and really, in some ways, most movingly of all, to watch really young people—high school and junior high schoolers—all over the world taking the lead here. Greta Thunberg is sort of the face of this and Greta’s fantastic. I really, really have come to like her. I can report happily that both she and her father seem to be recovering well from their brush with coronavirus.

[00:22:16] The really good news is there are 10,000 Greta’s all over the planet, young people who are doing a great, great, great job. Frontline communities and indigenous communities are really at the center of this work, and many of the greatest young leaders in the world are coming straight out of those communities. It’s really fun to get to work with all those people all the time.

[00:22:45] In the last five or six years, my job has basically been to just kind of highlight the work that they’re doing, and try to get everybody working together. It seems to me that unity, at this point, is absolutely essential if we have a chance of accomplishing the biggest task before us, which is basically to break the power of the fossil fuel industry and its ability to influence events going forward. That’s the titanic battle that’s underway.

**Erin O’Mara** [00:23:15] In that titanic battle, where does nuclear power fit? We have a couple of questions on that. John Crompton is wondering when we’re going to be able to have, he calls it a grown-up conversation about nuclear power. He wonders if people who oppose nuclear power have some ownership in our crisis. Len Rodberg is also pointing out that other alternative energy sources aren’t going to be able to handle the load. So, does nuclear power have a role to play?
Bill McKibben [00:23:51] Well, first of all, the idea that renewable energy can't handle loads is one of those shibboleths that we're disproving fairly quickly around the world. This was at the heart of this new Michael Moore movie, which was arguing that you use as much energy making a solar panel as it ever produces, and that it's completely useless. Happily, Josh Fox in The Nation, but also, scientists and engineers in dozens of other platforms around the world, quickly went to work debunking all of that, and pointing out that it's not true. We're now at a point where these are some of the best energy sources on the planet, and we're deploying them very quickly.

[00:24:40] We saw the news today that for the last 40 days running in the US, renewable energy has produced more energy than coal. That's pretty good news, and it's because this stuff is finally getting installed at a good pace. Not as good as we need it to be, we need to pick it up enormously, which is what the Green New Deal envisions. But it's there.

[00:25:05] That doesn't mean that it's a good idea to shut down existing nuclear power plants if they're the ones that are relatively safe because they're already there and producing energy. My guess is that we're not going to see new nuclear construction playing a big role in anything much going forward, at least in this country. Mostly, because it's incredibly expensive and incredibly slow.

[00:25:35] The price of solar panels dropped about 90 percent in the last decade as we've gotten better at producing them, but the cost of a nuclear plant just keeps going up and up and up, and the time it takes to construct them and get them built is now 10-20 years, putting it really outside the envelope of being super helpful.

[00:26:00] That said, I wrote a cover story for Time, last fall, envisioning the future, looking back from 2050 and imagining that we've made it through. One of the things I said was environmentalists had to swallow some, and figure out that it is probably a good idea to leave existing nuclear power plants open.

[00:26:29] Brooke's pointing out how low the prices for gas are right now and wondering, What comes out of this moment, and what gives us an incentive to end our dependence on fossil fuel?

[00:26:50] Well, I mean, that's a good question. If gasoline is $1.60/gallon, there are going to be more people buying SUVs for a while, but I think the low price of oil is probably doing more damage to the oil industry enough to compensate for that. This is an industry that's been in decline now for a decade. It has been the lowest-performing part of our economy, which is one of the reasons why divestment is becoming an easier and easier argument over time.
It's that way for two reasons. The oil industry, which was the dominant industry on planet Earth, has two problems. One, its product causes the greatest crisis the planet has ever faced, so eventually, it's going to face big regulatory pressure, and around the world it is. Two, people are coming up with better, cleaner, and cheaper alternatives. Even with low oil and gas prices, you're still better off locking in renewable energy when you can.

Yesterday in Abu Dhabi, they approved a new tender offer for the biggest solar array that will be built yet on planet Earth. Granted, Abu Dhabi is the single best place to build this because there's just constant sun in the desert, but they're going to be generating power for just over a penny a kilowatt-hour, which is so cheap, it's almost beyond belief.

The IAEA (the International Energy Agency) predicted a couple of days ago that we'd see oil, coal, and gas all fall almost 10 percent this year, but we'd see renewable energy increase about 10 percent, even amidst the economic damage of the pandemic. I think we've seen peak oil consumption on the planet. I think when we look back, 2019 will turn out to be the year with absolute peak oil consumption. The question is, how fast we can drive it down?

The real answer to that question, and the reason why what's happening now is really important, and why November's election is so important, is because the thing that's crucial here is breaking the political power of the fossil fuel industry. Their goal is to leverage their political power to keep their business model alive for a few more decades. We can't afford for that to happen ecologically, so we have to be able to break that political power. That's what movements have been aiming to do from the start.

Erin O'Mara

This is a good time to jump into how personal politics are. [Indistinct]—and please forgive me, I probably just mispronounced your name—wonders, “If Democrats win the White House in November, do you expect any significant movement to manage the environmental impact of climate change?” And there are several questions about the Green New Deal and how hard we should be pushing for it.

We should be pushing hard for it, and if Democrats win the White House, one should not expect it to be enacted the next day would be my guess. I think we’re going to have to fight for it, still. It's going to be just as crucial to win control of the Senate as it is to win control of the White House. Those are kind of cynical unknowns for getting pretty much anything done.

Even if we win those things, we're still going to have to fight. This is really hard, what we're talking about. The reason to want Democrats to win is (a) so that people stop doing actively bad things all the time and cutting away every single bit of clean air and clean water legislation, so on and so forth, and (b) so that you have people in power that you’re able to go pressure.
I worked hard to get Barack Obama elected, and then I worked hard to organize what, I think, we’re the largest demonstrations outside the White House during the Obama years to stop the construction of the Keystone Pipeline, a fight we eventually won in that administration and are (knock on wood) continuing, sort of, to win even in the Trump administration. The reason to elect Democrats to office is so that you can go pressure them. Nobody should think that our job ends on November 3. One job ends on November 3, and another job starts on November 4.

Erin O’Mara You just mentioned the Keystone pipeline. In an article you recently wrote for The Nation, you also pointed out that construction on that is going on even in this pandemic moment, creating even more risk for those communities. Can you let us know where that stands right now?

Yeah, so this is the single most disgusting story in a certain sense of the whole pandemic. The company that wants to build the Keystone pipeline, TC Energy (it used to be Trans Canada but like Philip Morris, they eventually got enough grief from all of us that they changed their name) seized the opportunity offered by the pandemic to decide that they were going to get a large sum of money—several billion dollars—from the government in Alberta where the tar sands are, where this stuff comes from, to go build their pipeline, because rational banks are really not that keen on it anymore. With that money, they announced that they were going to go ahead with construction, even though that meant bringing in construction crews from around America to rural parts of the country with bad healthcare systems to begin with. Exactly what any rational person would not be doing at the moment.

To add insult to injury, of course, much of that pipeline has to be built right around the edges of indigenous reservations where, historically, 90 percent of the population has been wiped out by pandemics over the last 500 years. So people were pissed. Faith Spotted Eagle of the Yankton Sioux Tribe said, This reminds us all too much of smallpox blankets. And it should have.

The good news is that a few days later, a federal judge ruled that the rushed permit process that the Trump administration had gone through in order to expedite this thing was a complete fraud, which it clearly was. So, at least for the moment, at least parts of it are, we hope, held up. There’s an incredible confusion around all of this.

Of course, one of the things that highlight is please, not another four years of appointing federal judges by the Trump administration, because if we get that, then there will never be a kind of rule of law like this, again. There won’t be judges who will be able to uphold what needs upholding, so it really reminds us of the stakes of our time again.
Erin O’Mara [00:34:42] You pointed out before that one of the ways to create change is by targeting the pocketbook; for example, protesting against Chase for having fossil fuel companies in their portfolio. Right now, the Fed is helping fossil fuel companies. I wonder if you have any thoughts about that. It’s a question also from Barbara.

[00:35:08] First of all, I just noticed someone in the chat saying something really important, which is that, by the way, everyone should be well aware that Keystone is not the only thing going on like this. We’ve got fights all over the place. One of those saddest is this stuff going on in Massachusetts, where they keep building this pipeline and the compressor station in Weymouth. It has become a huge battleground.

[00:35:32] In both cases, by the way, let’s just be clear: The reason they can build these pipelines is that we’ve established that these guys are critical workers whose work of building pipelines is essential in a time of the pandemic. At the same time that we’re announcing that we have way more oil and gas than we have any idea what to do with it. We’ve run out of places to put it. There are oil tankers floating off Long Island and Los Angeles today, dozens and dozens of them unable to offload. They’re just kind of waiting for people to– maybe the price will go up someday. Who knows. So it’s completely illegitimate.

[00:36:16] I got so worked up saying that, that I managed to forget what your question was here.

Erin O’Mara [00:36:21] No, that’s okay. It was, that strategy is to target your pocketbook.

Bill McKibben [00:36:30] The big push over the last year for the climate movement has been to take the momentum that has come out of fossil fuel divestment, which has become the biggest anti-corporate campaign in history. I think we’re at $14 trillion worth of endowments and portfolios that have divested in the last few weeks. Oxford University—maybe the most prestigious university on the planet—became the latest to do so.

[00:36:58] Take that, and move one ring further out, not just thinking about the oil companies, but thinking about the big financial institutions that are their lifeline. So, we formed this thing with tons of different groups called the Stop the Money Pipeline and took as our first three targets the big insurer, Liberty Mutual; the giant asset manager, BlackRock; and Chase, the biggest bank on the planet and the biggest fossil fuel lender.

[00:37:29] Liberty Mutual caved in one degree or another pretty quickly and came up with what’s not a great policy, but is certainly the most progressive so far in the US around things like coal. BlackRock, under intense pressure, was a huge, huge moment in January. Larry Fink, the CEO of BlackRock, which is by far the biggest box of money on planet Earth. By some calculations one
dollar in eight on our planet rests in their digital vaults someplace. They said that this climate change would become the defining economic issue for the planet, and that this was going to be guiding their decision-making going forward.

[00:38:15] It's a very strong set of announcements, and we're still sort of seeing whether or not they quite meant it or not. We'll have a better sense as shareholders season rolls along now. BlackRock owns 10 or 15 percent of almost everything, so how they vote their shares will be really important.

[00:38:32] We got a first, early, good glimpse, I think, of this kind of pressure last week when something really important happened. One of the campaigns that—one of the places we've been pushing—Chase Bank—was around the fact that their lead independent director was a man named Lee Raymond. Lee Raymond had been CEO of Exxon in precisely the years when, we now know, they found out everything there was to know about climate change and then built this architecture of climate denial to try and keep the rest of us from finding out. They were key players, Exxon in this. When he retired from Exxon with $686 million, his hobby job in retirement was lead independent director of Chase Bank, the biggest lender to the fossil fuel industry: about a quarter-trillion dollars just in the year since the Paris Climate accords.

[00:39:27] So, one of the things we were asking was for them to not have him re-nominated him to that role. Earlier this year, they said they were going to but then, thanks to all this activism, Scott Stringer, the Comptroller of New York, announced that the city pension funds would be voting those shares against Lee Raymond. He enlisted Tom DiNapoli, the treasurer for New York and a guy named Torcello, who's the treasurer for Pennsylvania to join him in this public announcement. We don't know quite what went on behind the scenes but, within a week, Chase caved and said they were starting the process of finding a new lead independent director. Not Mr. Raymond.

[00:40:15] My guess is they started to hear from people like BlackRock who said, We're not comfortable voting for this either. You might want to try and save some face here. That was a big moment in the kind of history of climate change. You know, it's hard to imagine a single individual more at the heart of getting us in the fix we're now in. So, in historical terms, I think, it really mattered. We'll see what its effect in practical terms will be.

Erin O'Mara [00:40:50] What about allies from unexpected places in the world in this fight to save our climate? Yvonne Davies is wondering if Pope Francis is having an influence on climate change goal, and I wonder if there are any other allies that come to mind?
Bill McKibben [00:41:06] Well, Pope Francis is— I mean, look, I'm a Methodist. So, what can I tell you? But I kind of wish I was a Francis Catholic because the *Laudato Si*, the encyclical on climate change and much more that he issued (and I think it'll be five years ago this summer). It's probably the most important radical document of the 21st century. It is at least as important as the work of Thomas Piketty or Naomi Klein—and, by the way, he's very much in conversation with works like that. It's a powerful— it begins as a kind of discussion of climate change and moves into a real critique of modernity in deep, deep ways. I got to spend a couple of weeks with it, because I reviewed it for the *New York Review of Books*. It was really, really spectacular, and it's having a big effect.

[00:42:13] For example, Georgetown University—which, either it or Notre Dame is the most important Catholic institution in this country—divested fully from fossil fuel a few weeks ago. That's a strong signal in our nation's capital from a player that has always been in the middle of our political life, a place where people from all sides meet and talk.

[00:42:38] So, Francis is a great example of a burgeoning religious environmental movement. People at groups like *Green Faith* have done an enormously good job of beginning to round up faith communities of all kinds. I noted the other day that Bartholomew—the leader of 400 million Orthodox Christians, and a guy who has been very outspoken about environmental issues for more than a decade—had issued just a really beautiful, powerful message on the 50th anniversary of Earth Day.

[00:43:14] So, this is one source of real power. Institutions like the Catholic Church don't change quickly, but once they change and once they start moving in a certain direction, there's a kind of grinding glacial quality to that unstoppable quality to that movement. So, I think it'll be an important part going forward.

Erin O'Mara [00:43:42] There are so many good questions, and I want to thank everybody. I wish we could fit them all in, and I'm going to try to get just a couple more in. We've talked about the shift to renewable energy, and John Howe questions if we should also be focusing on carbon drawdown strategies and what those might be.

Bill McKibben [00:44:03] Yep, we certainly should, and we're getting more focused on it. And there are other things we should be focusing on too, including energy conservation and efficiency. It's the time because solar panels and things get all the visibility, so let's talk about both those things.

[00:44:25] A good place to start is where you are in New York City. New York City Council adopted a really important bill last year that's going to force the quick retrofit of all large buildings in New
York City to dramatically—and I mean, dramatically—reduce their carbon footprint. They passed it over the complaints of the big landlords in the city, but they got it done. And it was a big victory for great local activists in New York City of whom there are really a lot working on these climate issues.

That should be a template for what we do around the country and around the world. There’s an enormous amount of waste, and cutting that waste would make all the other parts of this problem much, much easier to address. But even if we do everything right—as someone pointed out at the beginning—we’re already way over 350 parts per million, so we better figure out how to get some of that out. The ways to do it are not easy, and mechanical ideas for how to pull carbon out of the air remains speculative and expensive.

We also know that changes in the way that we use soil, that we grow our food can have quite large impacts if we were really able to play them out. One of the reasons that’s hard is because you’re dealing with such a huge target set; it’s hard taking on all fossil fuel companies, because they’re big and powerful, but there are only 20 of them that matter. There are a billion or more farmers on the planet, so getting them to change old practices and things are difficult.

On the other hand, this is one of these places where COVID-19 may offer us some real ways in. It’s pretty clear that our centralized food system is a bad idea in all kinds of ways. One of them is that it starts to shut down the minute people begin to get sick. So, maybe we’ll see some of that opportunity.

Erin O’Mara [00:46:40] You mentioned that it was just the anniversary of Earth Day. In an article you wrote for The Nation, you recalled that the first Earth Day in 1970 brought 20 million protesters out, which was about 10 percent of America’s population. It was extraordinary. I wonder if you can talk about the future of the climate action movement and a lot of people (and this sums up quite a few questions) were wondering what the problems are. What do we do now?

Bill McKibben [00:47:13] We keep building movements bigger and bigger and bigger and bigger. That’s why, frankly, things like that Michael Moore movie were so sad. They’re a cynical and nihilist attempt to divide the unity that’s been growing for years. I’m glad that people have debunked them in as many places as they can, because there’s no way that we will win this fight without millions upon millions of people.

Those people are starting to show up. We had seven million people in the street last September for these big climate strikes. It’s kind of tragic— I mean, of the many, many tragic things around the pandemic, one of the smaller but real ones is that it interrupted what would have been
the massive civil disobedience that we would have seen on Earth Day +50. That was a big, symbolic moment and it's gone by the boards.

[00:48:10] But we keep fighting and we keep organizing in lots of ways, and we're going to need that now more than ever. And it's not that there's a mystery about what needs to be done. We've known for a long time the basic outlines of what has to happen. There has to be a massive support for government build-out of renewable power fast. Because it's gotten so much cheaper over the last decade. That's no longer technologically or economically quixotic to say. There has to be government support for power for keeping fossil fuel in the ground.

[00:48:50] Happily, that's something that—because of people like Bernie Sanders pushing over and over and over again—now seems to be the mainstream doctrine of the Democratic Party. Joe Biden has said that on day one, he would stop all new mining and drilling and things on federal land in the US, which is a big deal because, after Russia and Saudi Arabia, the US as a whole is the single biggest source of carbon on the planet.

[00:49:23] So these are the kind of things that we need to be doing and the conservation work, and we best get to them. The thing that stands in the way of doing them is the enormous power of the fossil fuel industry and of the kind of people aligned with it.

[00:49:45] Remember that, say, the Koch brothers are our biggest oil and gas barons, along with being the main majority owner of the Republican Party. That's why they fight so hard against things like renewable energy. When it takes market share away from them, their grip on power begins to loosen. That's good. We have to speed it up. This is a fight like all fights: It's about money and power, ultimately. So, we have to assemble as much power as we can because we're never going to have as much money.

Erin O'Mara [00:50:24] Thank you so much there. There are so many questions that we can't get to. I think we could probably spend hours and hours with you. This has been extraordinary. I wonder, Don, if you have any remarks you'd like to make in closing?

D.D. Guttenplan [00:50:41] Yes, only to say I thank you so much, Bill, for spending the time and making the drive and letting us join you in that parking lot in Vermont.

[00:50:52] I'm thankful for the participants and for your fabulous questions and for the solidarity of helping each other and sometimes me with our technical problems as we've been watching this. It has been great to see, and it has been great to see that you're all still here.
This is the best turnout we've had yet, and it's amazing to see how eager people already are to hear what Bill has to say. I can speak only for myself and say that I feel enormously energized and ready to go out and carry on the work. So thank you so much, Bill.

Bill McKibben [00:51:26] And I'm just offering you, Don, one more glimpse of the Green Mountains as a farewell present.


Bill McKibben  Take care, y'all.


Erin O'Mara [00:51:39] Thank you. Thank you, everyone.