

Bill Gates on Climate Change, Covid and Whether He Has Too Much Influence

'I'm experiencing the greatest pushback ever in my life and somewhat unsure how to deal with that'



(Photos by John Keatley)

By **KK Ottesen**

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Bill Gates, 65, is an entrepreneur, philanthropist and self-described technologist. He co-founded Microsoft in 1975 with childhood friend Paul Allen and turned it into one of the largest companies in the world. With his wife, Melinda, he now co-chairs the Bill &

Melinda Gates Foundation, which focuses on global health and development, and on education in the United States. One of the largest private charitable organizations in the world, their foundation has given out more than \$50 billion in grants in 135 countries. Gates is also involved in a number of private-sector ventures to encourage innovation in the fields of health and climate change.

Released this month, his book “[How to Avoid a Climate Disaster](#)” details his own exploration of the causes and effects of climate change. In it, Gates offers a framework for avoiding climate catastrophe by attaining what he deems the necessary goal of moving from 51 billion tons of greenhouse gas emissions released each year to net zero by 2050. Noting that the world “has never done anything quite this big,” Gates argues that breakthrough technologies must play a critical role in getting there.

When did climate change become something you decided to focus your energy on — with the book and a good portion of your time and investments?

During my Microsoft career, which starts literally when I'm in college and then drop out, I was pretty monomaniacal. That is, even though I had a deep interest in chemistry, biology, physics — all the sciences — I just didn't focus much on them. So that includes climate change. But when, in 2006, I was leaving my full-time work [at Microsoft] and going to mostly focus on the foundation, I was lucky enough that some smart Microsoft people said, "Hey, you should learn about climate," and these two professors came to do half-day sessions four to six times a year, bringing in other experts. Not only did those people create great reading material, I could sit and ask them naive questions. It's a fascinating topic, climate change, because you have to understand weather and computer modeling and the industrial economy — a lot of things.

When I started studying it, I wasn't sure it was a big problem. I knew, as I traveled to Africa and saw that there were no lights at night and no power lines, that electrification is a necessary step in terms of economic growth, and so we had to somehow figure out a cheap way to get electricity into at least African cities. And I was hearing that there's this constraint

when you build electric factories: You're not supposed to just use coal. Because particularly in equatorial regions, towards late this century, the effect on subsistence farmers was going to be horrific. That is, there will be millions of deaths caused by climate [change] — and for exactly the people who caused it the least. So, way more unjust than the world is supposed to be.

And when I would meet with smart people who aren't full time on climate, they would ask, "Come on, what about this climate thing? Isn't there some MIT guy who says the clouds will stop it? Aren't there still possibilities that it's all overblown?" And I'm saying no, and trying to succinctly explain why and what we have to change. I felt that the framework wasn't there.

We almost came out with the book in March 2020, but then the pandemic hit. And, because of the foundation's depth in infectious disease and vaccines, my public role, which may have been increased even beyond Microsoft at its peak — it's hard to say — but I wanted to tell people about masks and vaccines. And the idea that then they would see me saying, "Hey,

keep wearing your masks, and by the way, the way you make steel is all wrong. You need to make steel some new way,” in the middle of the pandemic, that might seem a little incongruous. Like, all the sudden I was trying to tell them way too many things.

So, juggling how much to tell people at a time — that’s probably smart, but it’s an interesting thing to have to think about. Do you get pushback from people saying, “Who are you to tell me how to do this?”

Well, certainly on the [pandemic](#). Dr. [Anthony] Fauci and I are the primary targets of conspiracy theories that say I’m trying to make money and I’m trying to control population, or I’m trying to microchip people to track them. So, if you define “pushback” broadly, I’m experiencing the greatest pushback ever in my life and somewhat unsure how to deal with that. Because it speaks to the very motives of why the foundation is involved in vaccines and the work we’re doing on the pandemic. So a little bit, my reaction is: *That’s crazy*. But that doesn’t seem to stop it from coming.



Bill Gates in a meeting during the 2019 funding conference of the Global Fund to Fight AIDS, Tuberculosis and Malaria. (Jeff Pachoud/AFP/Getty Images)

Have you been surprised by the level of attacks through the pandemic about the masks and microchipping?

Oh, certainly. All that stuff. I mean, poor Dr. Fauci. He's just the nicest guy. When you choose to work on infectious diseases, like malaria, TB [tuberculosis], you're choosing to work on things that are extremely important and relate to millions of lives, but in rich countries are largely ignored. And so when you're at a cocktail party talking about TB, people do not migrate to your corner of the room.

In climate, I expect massive pushback from the people who don't think this is a cause worth putting resources in. But actually, I'd also expect pushback on the fact that I'm not proposing to spend trillions because I don't think [that level of investment will] ever show up. And I'm not proposing that it can be solved in 10 years, because it can't. And so, I think I'll have a chance to be damned by both sides as I try and steer a practical plan that deals with the constraints of what resources might become available.

In a blog post called “COVID-19 is awful. Climate change would be worse,” you argue that we’re at the same point today with climate change that we were with the pandemic issue when you were warning about that five years ago. So, how you do sound the alarm?

You know, I don't go down and do rallies and get people riled up. I don't pay for the people who stop traffic or any of those things. And so in pandemic land, there were no activists. And only in the tiniest way were the [warnings that I and others gave in 2015](#) [about the possibility of a pandemic] heeded. Maybe if I was smart

enough, I would have figured out how to get activism in that realm.

[With climate change], I'm coming in where energy and activism around this issue, primarily in the younger generation, is very high and saying: You've got the energy, and you've got the goal. And your goal is the right goal: zero by 2050. I'm simply saying: Hey, if you want to map that energy and goal into an actual plan, there's a breadth of topics that I've been spending time on, and my book is taking all of that and trying to make it accessible and saying, Here's the framework for what the plan would look like.

Do you think it *would* make sense to expand your partnerships to include activists?

Well, I'm sure I'll do an event, you know, where they bring me on as their numbers guy. And hopefully it doesn't bore them too badly. But, yes, I have a common cause with them. They bring organizing and energy.

I forget when, but the Guardian decided that the Gates Foundation, 2 percent of our assets being in oil companies because of some index we owned, that it was time

for people in canoes to sit out in front of my house and yell. And that if I just sold those 2 percent oil stocks, this climate thing would be completely solved. So there were episodes like that, where I would say, *Gosh, you know, all this idealism and energy that's getting stronger — let's make sure it connects to something real*. Because otherwise, we're going to breed a whole generation of cynicism around [the question]: Can you ever get government and innovation and the private sector lined up to do something big and hard?

The best we can do is have the breakthroughs in this next decade, so we still have 20 years to replace the entire industrial economy and all those hard things that [cause the majority of emissions].

In your book, you can sort of feel your excitement when you're talking about nuclear power.

You've got to get today's electricity to be completely clean. And as you stop using natural gas, a lot of the things, like heating homes with natural gas, become electricity. Powering passenger cars

becomes electricity. And so the total electricity you need in the U.S. will go up by about 2½ times.

And so, to make electricity cheap and reliable, there are three different paths. Only three. And any one of them is fine. You can have a miracle in storage, which means a grid storage battery. And we should pursue it as hard as we can. I've lost more money in battery companies than anybody, so I'm taking it seriously. But if the battery can only go a certain distance, the only two other solutions to give you reliable power that's cheap and clean is nuclear fission and nuclear fusion. All three of these paths have huge technical costs, safety and acceptance problems.

I started a nuclear power company called TerraPower [in 2006]. It's still a lot of risk. I couldn't guarantee you, either technically or in terms of societal acceptance, that it will have a chance to contribute. But I saw that as a way to help out. And I'll be happy if TerraPower was a waste of money because one of the other two paths works. That's fine. I didn't ever expect to get my money *back*. If I do, fine. It'll go for malaria.

When you think about whether to invest in something as a straight-up financial investor or more of a philanthropist, what are your rules for yourself?

Most of my money goes to the foundation. The foundation spends a bit over \$6 billion a year. And that's very exciting to me. I'm lucky to have the resources from Microsoft and the [resources](#) that Warren Buffett's provided to the foundation. Most of the things I'm doing are more limited by being able to hire smart people to spend the money well than by the financial constraints. It's just kind of outrageous that I'm in that position.

Do you ever worry that the size of the resources that you have available to deploy influences what you will fund, and that you might look for something that has bigger impact or potential — more of a silver bullet — and might stifle innovation by doing it that way?

You know, I put more into batteries than anyone. I put more into carbon capture than anyone. It's like when people say this to me about global health. I say the more

people who come into this, the better. It's sad that there's so little money in malaria and TB and HIV. It's just sad. Because you're saving lives for less than \$1,000. And why should we be the biggest funder of TB, malaria — the only one we're not the biggest funder [for is] HIV. Every other area the foundation works on — pneumonia, neglected diseases — we're significantly the biggest funder.

And same thing in climate change. If there's things I'm not funding, then, hey, I left low-hanging fruit for these other people to make me look foolish. So go grab it. Maybe my brain isn't good enough to notice it. It's a very complicated field. Yes, I can miss things that are out there. Most are more dead-ends. So I'm not trying to say that I have the innovation list and people should follow.



Bill and Melinda Gates in 2018. The Bill and Melinda Gates Foundation, which focuses on global health and development, and on education in the United States, has given out more than \$50 billion in grants in 135 countries. (Daniel Berman for The Washington Post)

Do you ever get pushback where people worry that you have too much influence? Is it something you think about?

In climate, when you're funding these breakthrough things, I just don't see that much downside in it. I'm not trying to create a groupthink in the field. And yeah, we might miss something. And that guy who goes out and says, "These Gates people are so big in this field, and my brilliant idea — they're so dumb they

didn't fund it." He might be right. I mean, we have finite IQ. But in climate, if somebody sees how to solve this thing without innovation, you know, then God bless them.

And if people think, "Oh, climate, Bill's got this one solved. I'm going to do an art museum," then that's really bad. I do not have this one solved. We need lots of people who agree with me and lots who disagree with me.

You have all this knowledge, these networks, this wealth. What sort of responsibility do you feel to make things better for people?

We all have our talents. And we should work hard. I work long hours because I enjoy it, you know? Nobody's pushing me. If anything, Melinda's like, *Hey, do you really want to push that hard?* Because, just with my personality, that's always a thing. And I'm not as crazy as I was in my 20s, when I didn't believe in weekends or vacations. She has helped me improve.

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lucky enough to have access to very smart people. I have enough money to catalyze some of these efforts. I have a way of thinking of the world that is kind of — I hope it’s not immodest to say polymathic. That is, I can connect things across different domains. I feel very lucky that this is a cause that I may be able to contribute to. It makes me feel like my time is well spent. And I love the discussions around it. I love working with science. I love things that it takes 10 years to see if it succeeds, and you have to have this broad systems understanding. You want the day-to-day to draw on your skills that you enjoy exercising. And you want it to be for some strong purpose. At Microsoft, we convinced ourselves that a computer on every desk in every home that would empower people and let them communicate was some wonderful thing. And we developed a real belief in that. It’s clearly not, from a pure moral point of view, as high as, say, saving millions of children’s lives that die of diarrhea.

So I’ve been spoiled. I mean, to have two greatly fulfilling, super-interesting

careers. I don't know if you'd call planet change a third career. It's just kind of in parallel. I get to work with very smart people on things that sometimes, when they succeed, have this super-dramatic effect.

For you, is it more of an intellectual imperative or more of an emotional or moral one?

When I go see a kid who's dying of malaria, when I'm thinking about a farmer who's going to have their crops ruined because of climate change, where these are the most vulnerable people in the world, that's a kind of direct, emotional thing to pick that and care about that. Probably I can come across as very sort of technocratic and numeric, and even sort of dry emotionally, when I'm talking about childhood deaths and the trends there or when I'm talking about bringing the green premium on steel down. But these do map into improving the human condition in a pretty dramatic way.

I believe deeply in this stuff. And I see the world improving. There's this Hans Rosling viewpoint I adopt of knowing the real facts of the world improving but

showing a great dissatisfaction at how much we still need to do and how slowly we're moving towards those improvements.

So what *does* the future look like? What can we expect on the climate?

I still am optimistic. I think that if people see how broad the work has to be and how critical innovation is across all these many different areas, and apply the resources, I think we can get to zero by 2050. People who think it's easy are almost as much of a problem as people who think it doesn't matter. You know, first I have to convince people it's hard, and then I have to say, "And, by the way, innovation, properly accelerated, is more magical than you think." Particularly if we take five approaches for every problem and therefore, even if only one of the five works, we'll be okay.

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