

# How Not to Despair Over Climate Change

Special to The Chronicle by Barb Howe

I teach INR 2002: Introduction to International Relations to undergraduates at the University of South Florida. International Relations (IR) is a subfield of political science that deals with the interactions among nation-states, or, since non-state actors are an increasingly important part of the equation, it might better be defined as the study of global political phenomena. After a few weeks spent on the history of the field, and the predominant theoretical approaches, we spend most of the class talking about global issues such as terrorism, migration, global health, poverty and, of course, climate change. Ah, climate change! That perennial downer of a subject! Can states really come together and take action to address a global problem? How do I avoid having all the students leave the climate change lecture feeling helpless and full of despair? I do two things.

The first is, I tell them about the Montreal Protocol, an international agreement signed in 1987, before most of them were even born. “We used to have this problem: a hole in the ozone layer,” I say, being somewhat misleading in my use of the past tense because the hole is not entirely gone away yet. “But in the 1980s the world came together and agreed to do something about it and now the hole is much smaller.” The hole—an area of depleted but not entirely absent ozone in the Earth’s atmosphere—was caused primarily by the use of chlorofluorocarbons (CFCs) in refrigerants and aerosols. All 198 member states of the United Nations signed the agreement making it the only UN agreement ever to be ratified by every single member country. The countries agreed to phase out the use of CFCs and other ozone depleting chemicals in phases, with different timetables for different countries and most importantly—this is the most important part I tell my students—they agreed to give funding to help poor countries afford to be able to do it. The countries agreed to set up a “Multilateral Fund for the Implementation of the Montreal Protocol” in 1991. Since then, according to the administering agency, the Fund “has supported over 8,600 projects including industrial conversion, technical assistance, training, and capacity building worth over US \$3.9 billion.” In other words, I say to my students, “nearly every country on Earth agreed not only to take collective action to solve a collective problem, they put their money where their mouths were and funded it.”

It is necessary to emphasize this remarkable accomplishment of international cooperation because by this time of the semester the students have all become devotees of Machiavelli—cynical “realists” who think all that matters in international politics is power and the use of force. One can’t blame them when we’ve been talking all semester about Russia’s invasion of Ukraine and why international organizations such as the UN or NATO cannot stop such a violation of sovereignty from happening. It seems to fall on deaf ears when I explain that back in the 1970s IR scholars were all talking about (mostly economic) interdependence between nation-states, and whether or not it would be possible to get states to cooperate voluntarily if there were no hegemon to force them to do so. One of the most famous IR theorists wrote a book with the now-confusing-to-students title of *After Hegemony*. But the hole in the ozone layer has now been shrinking for the past two decades (See: <https://earthobservatory.nasa.gov/images/150525/ozone-hole-continues-shrinking-in-2022>) and it happened because nearly every single country on the planet agreed to make it happen.

So what about climate change? It’s a bigger, more complex phenomena than ozone depletion to be sure, and the scope of the cause of the problem is much larger (fossil fuels rather than specific chemicals), but is it really impossible to imagine that humans can accomplish such an enormously daunting task? Think of the scale of what we have already accomplished though: collectively not all but only some human beings (mostly those living in developed countries) have burned so many fossil fuels and put so much carbon into the atmosphere that in a little over a century we have managed to change the climate of an entire planet. *An entire planet!* Changed by the actions of not even all humans who live on it! The problem itself shows what humans are capable of.

And there is even more reason for optimism. Last November at the 27th Conference of the Parties to the UN Framework on Climate Change (COP27) the 197 participating countries agreed to set up a “loss and damage” fund to help poorer countries respond to climate change. While this fund is to help poor countries cope with the effects of climate change, not move away from fossil fuels, as the Montreal Protocol shows, a dedicated fund is an important first step towards getting the problem under control. So far, financial assistance to help poorer countries transition to cleaner technologies remains up to individual states. In 2021, the Biden administration secured funding of about \$1 billion to help poor countries phase out fossil fuels. Foreign aid of this sort is not charity. Wealthy countries use foreign aid as the most effective and efficient way to fend off the problems that can result when economies in poor countries collapse for whatever reason, causing their citizens to have to migrate in search of a better life elsewhere. The best way to ensure that the United States continues to see a flood of immigrants seeking asylum here is to cut foreign aid.

The last thing I tell my students during the week we spend studying international responses to climate change is this: According to the world’s leading economists, it would cost as little as about 2% of global GDP to get us off this course of planetary destruction. That’s it. Just two percent of the world’s Gross Domestic Production. In 2020, that totalled about \$1.7 trillion. What does the world currently spend two percent of our GDP on? The military. The world’s countries spend \$2 trillion dollars, or 2.4% of global GDP, on militaries every year. We also actually spend that amount on subsidizing fossil fuels to create the problem! Every year governments spend \$500 billion dollars on direct subsidies for fossil fuels (source: <https://www.sapienship.co/decision-makers/2-percent-more>). Imagine if we spent that money on fixing the problem instead of creating it. Thirdly, governments also lose \$47 billion dollars every year to tax cheats—corporations and wealthy individuals who hide money in tax havens to avoid paying their fair share of taxes. We wouldn’t even need to impose new taxes to come up with the money to fund a response to climate change if countries just started cracking down on tax cheats and began collecting all the taxes they’re already owed.

What can we buy exactly with this two percent? The entire Amazon rainforest! “Based on the current price of rainforest land in South America, a one-time donation

equivalent to *one* percent of global GDP would enable local conservation groups to turn the whole of the Amazon rainforest into a protected nature reserve” (source same as above). We could also create a carbon-neutral economy for the whole world by 2050 and we can help poorer countries protect themselves from the worst effects of climate change: more severe storms, flooding, and drought.

According to the Intergovernmental Panel on Climate Change (IPCC), it would cost about \$2.6 trillion to keep global temperatures below the targeted threshold to avert the worst effects of climate change (that means keeping average temperatures from rising 1.5 degrees above pre-industrial levels). That is about three percent of global GDP. The world currently spends about 1.3% of global GDP on renewable energy, so this means an increase of only 1.7% more to solve the problem of climate change.

Here are just a few of the sources these numbers are based on:

- A poll of climate economists in Europe, Asia, and the Americas by Reuters in 2021 found that “hitting the . . . goal of net-zero carbon emissions will require investments in a green transition worth two to three percent of world output each year until 2050, far less than the economic cost of inaction.” To put that number in perspective, the world spent \$10.8 trillion on responding to the covid-19 pandemic since January 2020, which is over ten percent of global GDP. (source: <https://www.reuters.com/business/cop/climate-inaction-costlier-than-net-zero-transition-economists-2021-10-25/> or search for “Climate inaction costlier than net zero transition: Reuters poll”).

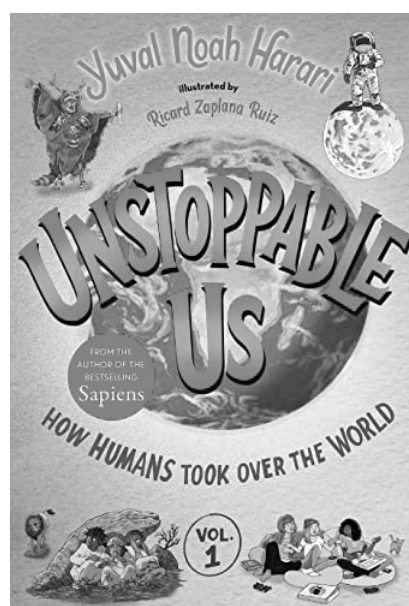
- A 2021 report, *Net Zero by 2050: A Roadmap for the Global Energy Sector*, by the International Energy Agency (available online via a search for that title) estimates that clean energy investments need to rise to a little over \$4 trillion by 2030. “Since the International Monetary Fund projects that Global GDP in 2030 will be around US \$149 trillion, these investments in clean energy will amount to about 2.85% of Global GDP. Since we already spend about 1.3% of Global GDP on clean energy and energy efficiency, this is an increase of just 1.55%!”

Given its origins in the first World War, its continuing emphasis on violent and deadly inter-state conflict, and the scope of the problems facing the world today, the field of International Relations can seem to be a depressing area of study. But we must remember this is only part of the picture. When faced with seemingly insurmountable problems, the nation-states of the world can come together and cooperate to create planet-wide solutions to planet-wide problems. The only thing that’s stopping us is the political will to do so.

*Barb Howe is a PhD candidate at the University of South Florida where she specializes in International Relations and Political Theory. Her dissertation is about how authoritarian states use social media.*



Source Material for Harari children’s book: 1) [https://www.harvard.com/book/unstoppable\\_us\\_volume\\_1\\_how\\_humans\\_took\\_over\\_the\\_world/](https://www.harvard.com/book/unstoppable_us_volume_1_how_humans_took_over_the_world/); 2) On Amazon at <https://www.amazon.com/Unstoppable-Us-Humans-Took-World-ebook/dp/B09S8VC1JB>; 3) Google books: [https://www.google.com/books/edition/Unstoppable\\_Us\\_Volume\\_1\\_How\\_Humans\\_Took/zl9eEAAAQBAJ?hl=en](https://www.google.com/books/edition/Unstoppable_Us_Volume_1_How_Humans_Took/zl9eEAAAQBAJ?hl=en); 4) Goodreads: <https://www.goodreads.com/book/show/60690713-unstoppable-us-volume-1>



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