Reducing Greenhouse Gases Is a Security Issue

https://www.e-ir.info/2019/06/07/reducing-greenhouse-gases-is-a-security-issue/

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My Introduction to Climate and Security

Fifteen years ago, luck would change the trajectory of my professional career. I was a predoctoral fellow at the Brookings Institution in Washington, DC, so I was already a little bit lucky. Geoff Dabelko, then of the Woodrow Wilson International Center for Scholars asked my colleague Nigel Purvis if he (and me by extension) would be willing to write a paper on the security implications of climate change for the United Nations. Kofi Annan, the Secretary-General of the United Nations at the time, was running an initiative on *Threats, Challenges and Change* to look ahead at the future of the international system, and he wanted, (or Brent Scowcroft, who was running the effort, wanted) a paper on climate change.

So, we wrote a little paper, which I think holds up pretty well. We argued that while climate-related conflicts might happen, the real and more urgent concern was going to be humanitarian emergencies. And, I have been writing variations of that argument with different applications ever since.

That's not all I've written on the subject, but one consistent theme of my work in this space is that it's much easier to draw a connection between climate change and humanitarian emergencies than it is to connect climate change to conflict. The causal chain is shorter. We don't have to look to the future. Climate-related emergencies happen all the time – Katrina, Haiyan, floods in Pakistan, Sandy, the Camp Fire, droughts in the Horn of Africa. We don't have to squint hard to imagine what fresh hell can happen when a city or an island is not ready and buffeted by a hurricane.

Since Nigel and I wrote that paper, that pizza slice of my academic scholarship dedicated to climate and security has grown larger, perhaps taking up half the pie by now.

In the wake of that paper, I got another fellowship in the International Security Program at Harvard University's Belfer Center in 2005. I was literate in international relations theory and international security, but I was not strictly or primarily a security studies scholar. But, when I got that fellowship, I thought I'd write a conceptual paper on how climate change could become a national security issue for the United States.

I wrote about the direct security effects climate change could pose to the U.S. homeland (such as the effects of Arctic ice melt on borders) and indirect effects to U.S. overseas interests (such as increased demand for military mobilization in the wake of humanitarian emergencies in countries of strategic import to the United States).

After multiple rounds of review, that paper became my first peer-reviewed article on climate and security, appearing in *Security Studies* in 2008. Along the way, the Council on Foreign Relations asked me to write a policy-oriented version of that paper, which came out in 2007, around the same time as the landmark study from CNA Corporation's Military Advisory Board and another report from the Center for Strategic and International Studies and the Center for a New American Security. 2007 was a good year to really kick off the policy debate about climate and security in the United States.

Academics Are Conflicted

I'm proud of that *Security Studies* paper but the review process dumped some sections that demonstrate some of the narrowing of the academic field of climate and security that lives to this day.

In my draft, I had some other sections on the proliferation risks associated with global scale-up of nuclear power that would occur if that became a solution to address climate change. I talked about how climate change could be elevated to a source of friction between countries if it became a top-tier issue of high politics in the international system. Those sections were cut in favor of a narrower argument that was more focused. While the challenges for militaries of humanitarian emergencies remained, my article had more in common with 1990s literature on environmental security, particularly in terms of its focus on the indirect effects of climate change.

That 1990s literature on environmental security focused on whether environmental change was implicated in conflicts, especially internal conflicts in the developing world. While the end of the Cold War led to calls for a more expansive vision of national security, scholars such as Thomas Homer-Dixon narrowed their optic to study the links between environmental change and conflict because it was tractable. Grander aspirations for redefining security largely fell by the wayside as the discipline generated a productive literature on environmentally driven violence in developing countries.

That vision has largely dominated the later academic scholarship on climate and security in the 2000s, again because the links between climate and conflict were thought to be something you could study empirically (see my review essay on environmental security in the *Oxford Handbook of International Security*).

The Policy Community Is Adaptable

The policy debate has had a slightly wider aperture, but has been limited in other respects. Policy folks who care about climate and security have focused on the potential for climate change to cause conflict. But that's not all they care about. They also care a lot about what climate change means for the military, and that means understanding its impacts on bases, training, operations, and missions, as the Department of Defense's 2014 *Adaptation Roadmap* and scores of other policy documents have explored.

But, even as the discussion about climate change and security has gained traction within the U.S. and other militaries, the focus has almost exclusively been about adaptation and resilience. Climate change is coming, and militaries have to prepare for the consequences. They face tough challenges, such as how Norfolk naval base will see more flooding, how high temperatures and wildfire risk may impinge upon training, how supply chains to theater might be disrupted by extreme weather or drought, and how militaries will be called upon more frequently to respond to humanitarian emergencies at home and abroad.

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One topic that hasn't been discussed in much depth is climate mitigation, that is, reducing emissions from greenhouse gases. When the Obama administration sought to diminish the fossil fuel footprint of military operations in favor of alternative fuels or distributed solar power, its goal wasn't to reduce the greenhouse gas emissions of the military per se, though that might be nice if it succeeded. Its goal was to make the job of trucking fuel to military theaters less dangerous.

The U.S. policy community on climate and security has pretty scrupulously avoided talking about mitigation because that was considered a political subject. There was potentially bipartisan concern about the ways in which weird weather affected the U.S. military. But, it didn't seem right, appropriate, or strategically wise to allow the climate security issue to become as politicized as the issue writ large. Ten years ago, that was the probably the right call.

Ten years ago, there wasn't a policy community, retired military, or civilians in government or active duty military who cared about this issue. There is now.

And the truth is reducing greenhouse gas emissions is a security issue. Why? Because if we don't address the

challenge of reducing greenhouse gas emissions, we as a species won't be able to adapt our way out of this problem. Runaway climate change, a 4° or 5°C increase in average global temperatures by the end of this century, will be an existential challenge for us as a species and many other living things. It won't just be islands in the Pacific that cease to exist because of climate change. It will be places like Miami. The future depicted by Al Gore, with his earnest slideshow maps of coastal inundation, is what we will be facing, but it's not just going to be the gradual rise of the seas that give us time to mimic the Dutch with coastal protections around populated areas.

No, it's going to be that plus storm surge and 50 inches of rain falling in a few days as occurred in Houston, Texas during Hurricane Harvey in 2017. It's going to be the Arctic heating up to be 20° or 30°F above seasonal norms. It's going to be searing temperatures that make it too hot to be outside for long in the Middle East and South Asia with implications for access to water, agriculture, electricity, and, really, human habitability. These are the kinds of effects that led the journalist David Wallace-Wells to write a dystopian essay and then book, *The Uninhabitable Earth*.

I've known mitigation was a security issue for as long as I've been writing about it, but I really only started to twin them in print in my essay last summer for *Foreign Affairs*, which the editors gave the understated title: "Warming World: Why Climate Change Matters More than Anything Else."

I don't think the climate security community will be as quiet about the mitigation challenge going forward. I think the turning point was when the Trump administration sought to bring a red teaming exercise of climate science back from the dead. The previous ill-fated effort had been championed by then-administrator of the Environmental Protection Agency Scott Pruitt, only to be shot down by the White House chief of staff. The second effort was to be led by William Happer, a retired physicist and longtime climate skeptic who somehow wangled a job on the National Security Council.

The climate security community vocally opposed this effort. Leaders from the Center for Climate and Security, the leading think tank on the topic, were especially forthright (full disclosure: I'm a Senior Research Fellow at the Center). John Conger, the Center's director and former Acting Deputy Under Secretary of Defense for Installations and Environment said:

So they want to set up a politically-led panel to undermine the credibility of military and security experts. They don't seem to understand that to the military and to the broader security community, this is an issue of risk, readiness, and resilience, not politics. The military doesn't have the luxury of deciding to ignore certain threats because a politician doesn't find them convenient.

So, where does that leave us? As a matter of national security, as a matter of planetary security, we have to reduce emissions of greenhouse gases to zero by the middle of the century if we are to have a shot at keeping global temperatures from rising more than 2°C (3.6°F) above pre-industrial levels. The habitability of the planet is a stake. That will require a massive shift to cleaner fuels for everything.

Global temperature averages are already more than 1°C (1.8°F) above pre-industrial levels. We may reach the 1.5°C threshold by as soon as 2034, and we may not stay under the 2°C increase, but that doesn't mean giving up. As I argued in *Current History* earlier this year, "While the goal of limiting the increase to 1.5° or 2°C above pre-industrial levels looks further out of reach as time passes, humanity cannot afford to give up on reducing emissions."

I made the point a little differently on Twitter:

The problem is people think the response is all or nothing, as if we fail to keep global temps from rising 2C, all is lost. In actuality, keeping temps from rising 2.5 or 3C would be a hell of a lot better than 4 or 5C so collective efforts are meaningful even if we miss 2C.

And that challenge isn't simply an environmental problem or an economic problem. It is a security problem because all of the security consequences of climate change that the policy community and academics worry about—food and water shortages, electricity outages, humanitarian emergencies, base inundation, migration, conflict—will be orders

of magnitude worse if we continue to do next to nothing to reduce emissions of greenhouse gases.

About the author:

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