

BRIEFER

No. 02 | July 20, 2011

The Inadequate U.S. Response to a Major Security Threat: Climate Change

Francesco Femia, Christine Parthemore and Caitlin E. Werrell

This report first appeared at the [Bulletin of the Atomic Scientists](#)

Over recent decades, the United States has dedicated enormous resources — in terms of money, manpower and national credibility — to reducing the threat posed by weapons of mass destruction, terrorism, and the global economic crisis. These commitments have been made not necessarily because the potential dangers are expected to materialize often — many of them are low-probability risks — but because the consequences if they do are so large as to be considered unacceptable. There's another threat that's both potentially devastating on a global scale *and* highly likely to become reality, but it has not received anything like the same attention or response from our civilian policymakers: climate change.

The US military and much of the broader national security community have actually [recognized](#) the seriousness of the threat posed by global climate change. The US Defense Department, for example, included the climate threat as a key pillar of its most recent [Quadrennial Defense Review](#), conducted [wargames](#) to plan for climate impacts, and, in its most recent Unified Command Plan, designated Northern Command to lead activities in the Arctic region. Even the CIA has established a [Center for the Study of Climate Change](#).

But US policymakers have failed to follow the security establishment's lead. As a result, the US response to climate change has been relatively feeble, even though increasing global temperatures pose an enormous threat to national and global security. The inadequacy of the US climate change effort is perhaps best illustrated by direct comparison to the country's responses to arguably less likely or smaller scale risks.

The risk: WMD proliferation

A [survey of experts](#) PDF conducted by US Sen. Richard Lugar in 2005 produced a median response of a 10 percent likelihood of “an attack involving a nuclear explosion” in five years and a 20 percent likelihood in 10 years. But these percentages were calculated in a haze of uncertainty. Governments and independent analysts cannot be entirely sure who may be planning an attack, who has the ability to acquire materials for, build, and use such a weapon, and who the intended target might be (see the Harvard Belfer Center's [Nuclear Threat Assessment](#)).

The response: Trillions on weapons, billions on non-proliferation

The US government has poured trillions of dollars into [maintaining a nuclear deterrent](#) and billions

into fighting the global proliferation of weapons of mass destruction. In fiscal 2010 alone, the Defense Department requested about [\\$19.1 billion](#) PDF for programs specifically related to combating WMDs. The United States is party to and helps fund a web of legally binding multilateral and bilateral arms control treaties, collectively known as the non-proliferation regime, that aim to control the spread of weapons of mass destruction. And the US has committed enormous resources and many lives to pressuring governments thought to be developing nuclear weapons, the most famous example being the US invasion of Iraq.

The risk: International terrorism

Although acts of terrorism are [highly likely](#) to occur, the targeted nature of the phenomenon usually limits the scale of destruction (with some of Al Qaeda's successful operations standing out as counter examples). As argued by [Michael Chertoff](#), former Secretary of Homeland Security, and even by President Barack Obama, the threat is not existential at a national or global level.

The response: A trillion-dollar global “war on terror”

The US responded with vigor to the attack of September 11, 2001, spending about \$1.12 trillion on overseas efforts alone through September 2010 and promoting no less than 16 legally binding universal instruments against [international terrorism](#) at the United Nations. This massively funded [counterterrorism policy](#) PDF involves government efforts that range from the CIA to local post offices and a large cast of front-line actors, including everyone from urban police officers to US special forces operating around the world. The billions of dollars spent and hundreds of thousands of American soldiers deployed have generated many tangible successes, recently capped off by the elimination of Osama bin Laden. Yet the character and scale of future terrorist threats remain open questions.

The risk: Systemic economic crisis

In February 2009, [Adm. Dennis Blair](#), then-director of national intelligence, and [Adm. Mike Mullen](#), chairman of the Joint Chiefs of Staff, de-

scribed the global financial crisis as one of the greatest security threats facing the US. Just the same, the root causes of economic crises remain unclear. Considering that furious debates still continue about the origins of the Great Depression and the ultimate causes of the most recent recession, there remains a high degree of uncertainty as to what events might cause the next panic.

The response: Massive stimulus spending, increased financial regulation

The US unleashed a huge response to the 2008 financial panic, much of it aimed at preventing future financial crises. In 2009, Congress passed the American Recovery and Reinvestment Act, a \$789 billion economic stimulus package. The US has instituted an expansive and robust financial regulatory regime, supported a deployment of the International Monetary Fund's Special Drawing Rights, equivalent to \$250 billion, to provide liquidity to the global economy, and participated in the creation of a robust international financial-stability architecture at the G20, with the little-understood but powerful [Financial Stability Board](#) at its core. Indeed, with US encouragement, the agendas of the G8, G20, and numerous other high-profile global economic fora have almost exclusively revolved around how to minimize the risks of another financial crisis. Policy makers acted swiftly even though, at the time, economists were vigorously debating potential solutions to the crisis.

The risk: Rapid climate change

There is a comparatively high degree of certainty about the likelihood, global scale, and severity of climate change impacts (see “Degrees of Risk” by the sustainable development nonprofit [E3G](#)). The Intergovernmental Panel on Climate Change, established by the UN and the World Meteorological Organization and including some of the world's top scientists, places the likelihood that the global climate is warming because of human activities — chiefly the burning of fossil fuels that release greenhouse gases into the atmosphere — at 90 percent or greater, an incredibly rare degree of certainty on any subject in the scientific world. There is also great certainty about the severe impacts

those changes will have, should they go unaddressed.

The IPCC is very certain, for example, that sea-levels will rise — by a meter or more — just as experts expect the current 50 percent of the Earth’s population living in coastal areas to climb to [75 percent](#) by 2025. Various impacts will infringe on state boundaries (and in some cases, [state existence](#)) as land is lost to the sea. Global agriculture production will be decreased by [floods and droughts](#), severely diminishing the world’s ability to feed a population expected to reach [9 billion](#) by 2050. Authoritative scientific reports project that climate change will also affect the availability of resources, including fresh water, compelling people to migrate within and across national boundaries to survive. The past has shown that such dynamics [can often result](#) PDF in conflict and violence.

The response: Relative to the risk, feeble

In fiscal 2010, the US spent just [\\$1.7 billion](#) on international climate change financing, a figure that pales in comparison to the financial responses to the aforementioned threats. Thanks largely to a recalcitrant Congress, the US has slowed the negotiations on the UN Framework Convention on Climate Change (UNFCCC) to a crawl. The agreements the US has entered, including the [Copenhagen Accord](#), rely on an unenforceable international honor system to combat emissions. Although the Supreme Court has ruled that the Environmental Protection Agency has the authority to regulate carbon dioxide emissions, the EPA is under attack, and the federal government has no le-

gally-binding cap on the greenhouse gas emissions that cause global climate change.

The US government has invested trillions of dollars in efforts to prevent and mitigate the risks of weapons of mass destruction, global terrorism and systemic economic crises, because the consequences of inaction are considered unacceptable. These investments were made despite significant uncertainty about the frequency with which these catastrophic events might occur. When it comes to climate change, the consequences of failing to appropriately manage risks are also unacceptable. Meanwhile, the scientific community is as close to certain as humanly possible about the prospects for global crisis. Without action, the overwhelming scientific consensus asserts, a climate catastrophe that threatens billions of lives will almost surely occur. Such a dire and certain security threat calls for an urgent and financially significant response from US policymakers. Simply put, climate change is a serious threat to the United States and the world. Military leaders understand it, the national security community understands it, and it’s time our civilian leaders responded accordingly.

Francesco Femia and Caitlin E. Werrell are Co-Founders and Directors of the Center for Climate and Security

Christine Parthemore is a Fellow at the Center for a New American Security (CNAS), where she directs the Natural Security Program, which explores national security and foreign policy issues related to natural resources and their consumption.