

BRIEFER

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Taking Stock: Integrating Climate Change into U.S. National Security Practices in 2022

*By Erin Sikorsky and Brigitte Hugh
Edited by Francesco Femia*

INTRODUCTION

In late 2021, the Biden Administration released a suite of national security and foreign policy documents¹ that according to the administration, would “serve as a foundation for [its] critical work on climate and security moving forward.”² This briefer synthesizes four key takeaways of these reports: 1) Climate change is forcing the U.S. national security community to reexamine its assumptions about how the world works; 2) Climate security is a current problem *and* a future problem; 3) Climate security risks are wide-ranging and not confined to particular geographies or sectors; 4) Climate security cannot be separated from other major security concerns—in fact, it shapes and exacerbates those concerns.

If 2021 was about analyzing the problem and making the case that climate change is a national security concern, then 2022 should be about making concrete changes to how US agencies do business so they are equipped to address climate security challenges going forward. To that end, we recommend that the U.S. government pursue five priorities: **1) Mainstream climate security in regional strategies; 2) Link climate adaptation programs with conflict prevention; 3) Maximize whole-of-government approaches to linking climate science and national security; 4) Increase climate security support for allies and partners; 5) Leverage strategic foresight tools to prepare for climate security risks - including worst case scenarios.**

¹ These documents included: (1) National Intelligence Estimate (NIE) on Climate Change from the Office of the Director of National Intelligence (ODNI); (2) Department of Defense (DoD) Climate Risk Analysis (DCRA); (3) Strategic Framework to Address Climate Change for the Department of Homeland Security (DHS); (4) Report on the Impact of Climate Change on Migration, the first such report released by the United States Government; (5) The Department of Defense Climate Adaptation Plan.

² [“Fact Sheet: Prioritizing Climate in Foreign Policy and National Security.”](#) The White House, October 21, 2021.

FRAMING THE PROBLEM: THEMES FROM 2021 CLIMATE SECURITY ANALYSIS

In late 2021, the Biden Administration released multiple reports related to climate change and national security, including three analytic reports, the National Intelligence Estimate on Climate Change, the DoD Climate Risk Analysis, and the National Security Council-led Report on the Impact of Climate Change on Migration. The two other reports, the DoD Climate Adaptation Plan and the DHS Strategic Framework to Address Climate Change, were more traditional policy documents. USAID also released a draft climate change strategy for public comment that is now being finalized.

We have identified four major themes across each of these documents that frame the challenges faced by the U.S. government as it tackles climate security issues.

First, **climate change is forcing the U.S. national security community to reexamine its assumptions about how the world works.** The sixth Intergovernmental Panel on Climate Change (IPCC) assessment report, released in August 2021, notes that, “there will be an increasing occurrence of some extreme events unprecedented in the observational record with additional global warming, even at 1.5°C of global warming.”³ Preparation for future climate risks can no longer rest on past understandings of extreme events. As the DoD Climate Risk Analysis (DCRA) noted, “analyses based on historical frameworks will not be sufficient to prepare for future risks complicated by a changing climate.”⁴ Extreme weather, rising temperatures, and the energy transition are all factors which will upend traditional planning assumptions—from strategic level understandings of other countries’ core interests to more tactical level understandings of where and when insurgent groups will likely fight.

Climate change is reshaping the security landscape and creating new threats. As Secretary of Homeland Security Alejandro Mayorkas notes at the beginning of the DHS Strategic Framework, the threats posed by climate change to the homeland deserves as much attention as terrorism, cyber threats, and the COVID-19 pandemic.⁵

Second, **climate security is a current problem and a future problem.** Climate change is already here. “Look at almost every place where you see threats to international peace and security today—and you’ll find that climate change is making things less peaceful, less secure, and rendering our response even more challenging,” said Secretary of State Antony Blinken at an United Nations Security Council meeting in September 2021.⁶ As the DHS Strategic Framework explained, its plan was designed in part to tackle the department’s “duty to safeguard the homeland from today’s increasingly severe, frequent, and destructive climate change-related emergencies.”⁷ The DCRA also notes, “many effects to the physical environment are now unavoidable and will continue to shape our security environment.”⁸ Hence, adaptation and resilience measures are critical to the climate security response—to tackle existing challenges and those that will emerge over the next few decades.

However, the analysis across all the documents makes clear that climate adaptation and resilience only get you so far. Each report details how the security challenges associated with climate change will worsen in decades to come if emissions are not cut. The NIE outlines differentiated human security impacts at 1.5 degrees Celsius and 2.0 degrees Celsius warming, and notes the increasing pressure on governments to act as temperatures rise. As the report states, “Geopolitical tensions are likely to grow as countries

³ [IPCC, 2021 Summary for Policymakers](#), August 2021.

⁴ [“Department of Defense Climate Risk Analysis.”](#) Department of Defense, October 2021.

⁵ [“DHS Strategic Framework for Addressing Climate Change.”](#) Department of Homeland Security, October 21, 2021.

⁶ [Secretary Antony J. Blinken at UN Security Council Meeting on Climate and Security](#), UN Headquarters, Department of State, September 23, 2021.

⁷ [“DHS Strategic Framework for Addressing Climate Change.”](#) Department of Homeland Security, October 21, 2021.

⁸ [“Department of Defense Climate Risk Analysis.”](#) Department of Defense, October 2021.

increasingly argue about how to accelerate the reductions in net greenhouse gas emissions needed to meet Paris Agreement goals.”⁹ The Security Threat Assessment of Climate Change report released by the Center for Climate Security in 2020 showed that if the world remains on a ‘high warming’ trajectory, the security implications in the second half of the century will be catastrophic.¹⁰

Third, climate security risks are wide-ranging and not confined to particular geographies or sectors. No region of the world will be untouched by the climate crisis. As Tegan Blaine, a senior advisor at the United States Institute of Peace, put it: “Many geographies are going to become increasingly inhospitable to human society as we know it.”¹¹ Though some countries may have more resources and tools available to navigate shocks to their systems, no country will escape the effects. The NIE identifies 11 countries facing high levels of insecurity due to climate hazards—including some in the United States’ backyard (Guatemala, Honduras, Nicaragua) and some armed with nuclear weapons (Pakistan, India, North Korea). It also highlights two regional “arcs of vulnerability”—Central Africa and Pacific Island States.¹² Also concerning is what the NIE says about risks to the United States and other wealthy countries:

“The United States and others...are in a relatively better position...to deal with the major costs and dislocation of forecasted change, in part because they have greater resources to adapt, but will nonetheless require difficult adjustments. Climate impacts such as excessive heat, flooding, and extreme storms will prove increasingly costly, require some military shifts, and increase demands for humanitarian assistance and disaster relief operations. Adjusting to such changes will often be wrenching, and populations will feel negative effects in their daily lives that will become more difficult to reverse without successful efforts to reduce net emissions and cap warming temperatures. The impacts will be massive even if the worst human costs can be avoided.”¹³

Fourth, climate security cannot be separated from other major security concerns—in fact, it shapes and exacerbates those concerns. Each of the reports emphasizes the interconnections between climate change, other security factors, and the second order risks that can emerge. The migration report puts it clearly, noting, “When combined with physical, social, economic, and/or environmental vulnerabilities, climate change can undermine food, water, and economic security. Secondary effects of climate change can include displacement, loss of livelihoods, weakened governments, and in some cases political instability and conflict.”¹⁴

There is nothing more “major” right now than competition with China. Both the DCRA and the NIE underscore the need for bringing a climate lens to policy regarding China. For its part, the DCRA acknowledges that the behavior of U.S. competitors and adversaries will be altered by climate change, noting that in the Indo-Pacific, “China may try to take advantage of climate change impacts to gain influence,”¹⁵ as the Center for Climate and Security warned back in 2015.¹⁶ The report also indicates that, “U.S. allies, partners and competitors are assessing the implications of climate change to their strategic objectives.”¹⁷

⁹ [“National Intelligence Estimate: Climate Change and International Responses Increasing Challenges to US National Security Through 2040”](#), Office of the Director of National Intelligence, October 2021

¹⁰ [“A Security Threat Assessment of Global Climate Change”](#), National Security, Military and Intelligence Panel (NSMIP), Center for Climate and Security, February 2020.

¹¹ [Analysis to Action: Advancing Climate Security in the Biden Administration](#), Event, Center for Climate and Security, November 17, 2021.

¹² [“National Intelligence Estimate: Climate Change and International Responses Increasing Challenges to US National Security Through 2040.”](#) Office of the Director of National Intelligence, October 2021

¹³ Ibid.

¹⁴ [“Report on the Impact of Climate Change on Migration.”](#) The White House, October 2021

¹⁵ [“Department of Defense Climate Risk Analysis.”](#) Department of Defense, October 2021.

¹⁶ [“The U.S. Asia-Pacific Rebalance, National Security and Climate Change.”](#) Caitlin E. Werrell and Francesco Femia, The Center for Climate and Security, November 2015.

¹⁷ [“Department of Defense Climate Risk Analysis.”](#) Department of Defense, October 2021.

The NIE identifies where China is trying to gain advantage in access to critical minerals and areas in which Chinese behavior is exacerbating climate risks, such as on the headwaters of shared river basins. For example, the report notes that Chinese dam-building on the Mekong River is already a flashpoint with downstream neighbors, because it “threatens the smooth flow of water for agriculture and fishing on which other countries rely heavily, particularly Cambodia and Vietnam.”¹⁸

Finally, the migration report identifies the possibility that China could leverage migration stress in the West for its own gain, stating, “Absent a robust strategy from the United States and Europe to address climate-related migration, the People’s Republic of China (PRC), Russia, and other states could seek to gain influence by providing direct support to impacted countries grappling with political unrest related to migration.”¹⁹

Whereas the Secretary of Defense Lloyd Austin has termed China the pacing threat for the United States, climate change should be considered the shaping threat.²⁰ It will shape not only the foreign policy decision-making of adversaries like China and Russia, but of U.S. allies in Europe and the Pacific as well. Climate will shape nuclear concerns, violent extremism, and trade, among other strategic concerns. As John Conger, Director Emeritus of the Center for Climate and Security, has noted, the 2010 Quadrennial Defense Review cited climate change as an “instability accelerant.”²¹

KEY ACTIONS FOR 2022

As the Biden Administration develops its climate security agenda for the coming year, we recommend quick and concrete action in the following five areas to build on the momentum of 2021. We expect the forthcoming National Security Strategy (NSS), National Defense Strategy (NDS), and FY23 budget request to highlight the nexus of climate change and national security. The following recommendations are designed to further cement and institutionalize climate security gains within key agencies going forward.

Mainstream Climate Security in Regional Strategies. For climate security approaches to stick, they must be adopted and championed by regional policymakers at the National Security Council (NSC), the State Department (State), the Department of Defense (DoD) and the US Agency for International Development (USAID). In 2022, the NSC should consider developing a handful of regional or country climate security strategies, led by the Directorate of Climate and Energy in partnership with the respective regional teams. For its part, at the State Department, D/Policy Planning (S/P), the Special Envoy for Climate, and the Bureau of Oceans and International and Scientific Affairs (OES) should work with the regional assistant secretaries to ensure they have the analytic tools and personnel needed to bring a climate lens to their work on a regular basis. Similarly, at DoD, the Office of Secretary of Defense (Policy) (OSD(P)) should leverage the regional deep dives in the Defense Climate Risk Analysis report to partner with the combatant commands in developing climate-informed strategies and operational plans. Africa Command (AFRICOM) and Indo-Pacific Command (INDOPACOM) are particularly good places to start for DoD, given the high climate vulnerabilities in the former and the nexus of geopolitical competition and climate change in the latter.

Link Climate Adaptation Programs with Conflict Prevention. At the United Nations Climate Change Conference in 2021 (COP26), President Biden announced the President’s Emergency Plan for Adaptation and Resilience (PREPARE) to support developing countries and communities in vulnerable situations around the world in their efforts to adapt to and manage the impacts of climate change. As USAID and

¹⁸ [“National Intelligence Estimate: Climate Change and International Responses Increasing Challenges to US National Security Through 2040.”](#) Office of the Director of National Intelligence, October 2021

¹⁹ [“Report on the Impact of Climate Change on Migration.”](#) The White House, October 2021

²⁰ Sherri Goodman, Erin Sikorsky and Francesco Femia [“The US Can’t Compete with China Without Tackling Climate Change.”](#) *Defense One*, 1 November 2021.

²¹ [Analysis to Action: Advancing Climate Security in the Biden Administration](#), Event, Center for Climate and Security, November 17, 2021.

State lead this new initiative, they should integrate environmental peacebuilding and climate security principles into its implementation, to ensure adaptation programming does not inadvertently exacerbate local competition or instability. The recent Senate confirmation of Assistant Secretary of State/Conflict and Stabilization Operations Anne Witowsky²² provides an additional opportunity to deepen the integration of climate change into conflict prevention mechanisms in the department as well.

Maximize Whole-of-Government Approaches Linking Climate Science and National Security. In 2022, the Biden Administration should ensure the interagency is fully leveraging its coordinating bodies to build cross-sectoral climate security collaboration between the US scientific agencies and the national security community. This includes the soon-to-be-launched National Academies Climate Security Roundtable,²³ the Climate Security Advisory Council,²⁴ and the re-instated Climate Change and National Security Working Group.²⁵ The Administration should also explore opportunities to leverage the US Global Change Research Program to both inform climate security assessments of risks abroad and lay the groundwork for a national resilience plan that sets the stage for climate security at home.

Increase Climate Security Support for Allies and Partners. Senior US Defense officials regularly emphasize that one of the United States' key comparative advantages on the world stage is its allies and partners. Many of these countries face significant climate risks that will strain their military services and security posture, from more destructive tropical storms in the Indo-Pacific to droughts and heatwaves in the Middle East to thawing permafrost and opening sea lanes in the Arctic. This year the United States should fast track efforts to share its climate risk foresight capabilities and its technological know-how in building resilience and adaptation to climate shocks with allies and partners. One opportunity is the re-launch of a program akin to the Defense Environmental International Cooperation (DEIC) program, which could fund efforts by each combatant command to engage in climate security partnerships in their respective regions. The State Department should also robustly integrate climate security programming into its International Military Education and Training programs.

Leverage Strategic Foresight Tools to Prepare for Climate Security Risks - Including Worst Case Scenarios. Both the President's Executive Order on Tackling the Climate Crisis at Home and Abroad and the FY2022 National Defense Authorization Act (NDAA) require the Department of Defense to integrate climate change into its wargaming exercises. As DoD does so, it should consider so-called "worst case" climate scenarios in its planning. Many climate-related extreme weather events are hitting harder and earlier than scientists initially projected, and 2021 brought a range of unprecedented shocks—such as the December wildfires in Colorado and Hurricane Ida flooding in New York—that are redefining our climate baseline. Other agencies such as the State Department, the Director of National Intelligence, USAID and the Department of Homeland Security should also regularly conduct climate-related scenarios and tabletop exercises to facilitate planning. The intelligence community in particular should examine the less certain but high impact long term scenarios such as the potential collapse of the Thwaites Glacier in Antarctica. The National Security Council should also consider convening a government wide climate security exercise focused on the homeland.

CONCLUSION

Climate change will be the shaping threat for national security concerns in the United States and around the world as we move through the twenty-first century. In 2021, the Biden Administration took big strides towards prioritizing climate security for the United States. Now as the government seeks to move from analysis to action, it can take immediate action in 2022 to institutionalize climate change within its national security agencies.

²² [PN496 — Anne A. Witowsky — Department of State](#), Congress.gov, January 5, 2022

²³ [Climate Security Roundtable](#), National Academies of Sciences, Engineering, Medicines.

²⁴ [50 U.S. Code § 3060 - Climate Security Advisory Council](#), Cornell Legal Information Institute.

²⁵ Part I, Sec. 104. [Executive Order on Tackling the Climate Crisis at Home and Abroad](#). The White House. January 27, 2021.

Erin Sikorsky is the Director of the Center for Climate and Security and the International Military Council on Climate and Security. Previously, she spent over a decade in the US intelligence community, including on the National Intelligence Council where she led climate and environmental analysis across the intelligence community.

Brigitte Hugh is a Program Assistant at the Center for Climate and Security. She holds a Master's degree in Political Science, Anticipatory Intelligence from Utah State University