

CLIMATE & SECURITY NETWORK: NPS RESEARCH PRIORITIES

AT A GLANCE

WHAT IS IT?

Climate Security represents the significant impacts associated with climate change that substantially alter political stability, human security, and national security infrastructure. Climate Security is directly related to the goals of *Climate Action 2030*: Build Climate Resilience and Reduce Climate Threat.

WHY DOES IT MATTER?

Climate change will continue to threaten national security as extreme weather and other changes inhibit the fleet in meeting its mission. Research and education advances understanding of climate change and improve decisionmaking.

WHAT IS NPS' ROLE?

NPS has a leading role in conducting research and educating officers to ensure a climate ready force. The Climate & Security Network advances research and curricula through Meteorology, Oceanography, National Security Affairs, Operations Research, Energy, Defense Management and Engineering.

POINTS OF CONTACT:

Ms. Kristen Fletcher Lead, Climate & Security Network Energy Academic Group kristen.fletcher@nps.edu

Ms. Marina Lesse Energy Academic Group marina.lesse@nps.edu



NPS addresses climate security issues through interdisciplinary and collaborative research.

Climate System Science: NPS is researching how constantly evolving environmental conditions affect security and DoD operations. This includes advanced climate system analysis, modeling, and prediction, the development of decision support tools for improving operational planning and outcomes, and transitioning research products to operational use.

Energy Security: NPS is researching the intersection of energy and climate security including: pathways to net zero emissions, innovations in operational energy, advancing energy resilience and the energy transition and political stability.

Climate Security: NPS applies research and education to address complex climate challenges including installation resilience assessments, preparing for climate-exacerbated events including humanitarian aid and disaster response, and partnering to address environmental security issues across the federal government.

Supply and Logistics: NPS research is empowering the force to ensure climate impacts don't interrupt access to supplies, materials, services and to reduce demand for key logistics drivers such as energy and water. Researchers also analyze the climate impact on ship to shore and shore to ship operations.

Climate Change Impacts on Operations: Understanding the impacts of climate change on operations is critical to mission readiness. NPS helps to integrate climate impacts into planning to meet mission demands in a changing environment. NPS partners with ONR and others on a related NATO effort building capacity with allies.

Climate and Security Education and Curriculum: As the Navy's postgraduate education and research institution, NPS has a lead role in meeting the DoN's climate literacy goals. NPS curriculum includes climate security across disciplines to improve climate-informed decisions throughout the enterprise.

Potential Future Contributions: NPS research can contribute to solving climate security challenges through the application of artificial intelligence and unmanned systems, budget and acquisition research and curriculum, consideration of public health impacts, and the science of behavior change.



Join the NPS Climate & Security Network at nps.edu/climate

NAVAL POSTGRADUATE SCHOOL

Climate Change, Security and Sustainability

NPS has a leading role in conducting research and educating officers to ensure a climate ready force, ensuring an understanding of climate change and improved decision-making in the face of it. Through graduate education and research, NPS helps solve the complex climate security challenges of the Navy, Marine Corps, DoD and international partners.

The NPS Climate and Security Network provides a forum to advance this collective expertise on climate security and creates opportunities for interdisciplinary collaboration and information sharing. NPS and the Network advance research and curricula through Meteorology, Oceanography, National Security Affairs, Operations Research, Energy, Defense Management and Engineering.

Partnering to Solve Complex Climate Security Challenges

Because climate security problems are complex and require innovative and collaborative solutions, NPS has created an Educational Partnership Agreement with Stanford University and its Doerr School of Sustainability. The partnership brings together the institutions' faculty, students and researchers along with industry and other academic partners to advance applied research and interdisciplinary problem-solving. From Engineering and Oceanography to Economics and Policy, the expertise at these institutions is immediately relevant to the warfighter, including:

- Ocean Science and Monitoring
- Climate Statistics/Forecasting
- · Arctic change, sea ice dynamics and modeling
- National security impacts of climate change

Energy Security

Critical infrastructure protection

Contributing to the DON Climate Analytic Agenda

The work of NPS and Stanford will contribute analysis and solutions to the significant impacts associated with climate change that alter political stability, human security, and critical infrastructure, including the goals of the DON Climate Strategy, *Climate Action 2030*: Build Climate Resilience and Reduce Climate Threat.

Just as the Climate and Security Network serves as a hub for this work at NPS, NPS will serve as a gateway for addressing climate challenges facing the DON, including climate challenges facing installations and surrounding communities, preparing for climate-exacerbated events including humanitarian aid and disaster response, advancing energy solutions and decarbonization and partnering to address climate change issues across disciplines.





