

A E ICA ACADEMY  
OF ARTS & SCIENCES

COMMISSION ON ACCELERATING CLIMATE ACTION



Head National Security, War, Global, of  
Climate Change Security Risks

sudden consequences; socioeconomic disparities; unavailability of critical resources such as water, food, and energy; supply chain problems; and national coordination difficulties. Based on the listening sessions, the working group chose to explore three key messages for effective climate action:

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change often indirectly impact global supply chains, creating additional vulnerabilities for underresourced populations across the globe. Effectively addressing climate change requires adopting a systems-level view.

These interconnections also create barriers to cooperation. In the Colorado River Basin, water sources and uses are regulated by multiple levels of government, creating a complex system with inefficient management and requiring cooperation across states. Competing priorities in federal

alleviate some of the strain on the water system. However, adopting these technologies requires farmers to take on risk.<sup>6</sup> This risk is compounded by long growing cycles that create few opportunities for trial and error, have high start-up costs, and are subject to an ever-changing regulatory space, leaving farmers hesitant to adapt today when better options might become available in subsequent years.<sup>7</sup>

Climate disasters can cause costly, severe, and long-lasting impacts, but the impetus for action is still minimal. For big infrastructure projects in the Gulf Coast, government subsidization of risk can backfire. Many important pieces of infrastructure, such as large ports, are considered “too big to fail” and thus continue to operate under the implicit promise of government intervention in case of climate disaster. If government subsidizes the risk, it disincentivizes forward planning and risk management, which potentially magnifies consequences for surrounding communities.<sup>8</sup>

Finally, considering risk through a national security lens requires understanding global energy policy and carefully balancing efforts to decarbonize with efforts to maintain energy security. As the world transitions to renewable energy, the United States must consider the national security implications of its dependence on other countries for necessary technologies and resources. Additionally, the U.S. workforce will be impacted by any energy transition. Environmental justice issues, such as taking jobs away from communities with limited economic opportunity, must be centered in strategic plans to avoid risk to individual workers and small communities.

Our listening session experts also cautioned that risk assessment requires specific and clear data that are not currently available. While big data has potential for climate forecasting, data quality problems persist.<sup>9</sup> Regional data collection by universities and other research institutions

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6. John Fleck and Brad Udall, “Managing Colorado River Risk,” *Science* 372 (6545) (2021): 885, <https://doi.org/10.1126/science.abj5498>; and Joel Lisonbee, Elizabeth Osowski, Meredith Muth, Veva Deheza, and Amanda Shefeld, “Preparing for Long-Term Drought and Aridification,” *Bulletin of the American Meteorological Society* 103 (3) (2022): E821–E827, <https://doi.org/10.1175/BAMS-D-21-0321.1>.

7. P. L. Taylor, K. MacIroy, R. Waskom, P. E. Cabot, M. Smith, A. Schempp, and B. Udall, “Every Ditch Is Different: Barriers and Opportunities for Collaboration for Agricultural Water Conservation and Security in the Colorado River Basin,” *Journal of Soil and Water Conservation* 74 (3) (2019): 281–295, <https://doi.org/10.2489/jswc.74.3.281>.

8. Robin Kundis Craig, “Coastal Adaptation, Government-Subsidized Insurance,

can provide foundational data to help manage risk and adapt to climate

to face the worst climate impacts. Throughout the white paper, the Gulf Coast region and the Colorado River Basin case studies provide recurring themes that suggest barriers to climate action that are applicable to other regions and landscapes as well.

However, the human and national security threats facing each region

example of this is the Terrebonne Parish Adaptation Strategy, which generated parish-wide, community-driven adaptation strategies for residents to prepare for anticipated environmental changes.

