

DOE's Climate Action & Resilience Plan (CARP)

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Presentation to the
NAS Nuclear and Radiation Studies Board
Winter Meeting
December 14, 2021

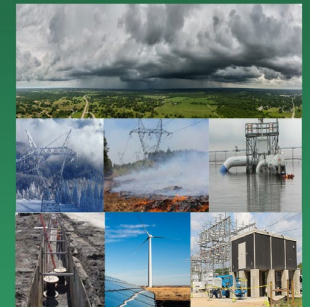
The CARP lists DOE's Climate Policy Statement and its five adaptation priority actions to address.

DOE's Climate Policy Statement:

- Affirms DOE's commitment to lead by example in Federal efforts to manage the short and long-term effects of climate change on our mission, policies, programs, and operations
- Reaffirms DOE's goal to address the challenges in President Biden's Executive Order (E.O.) 14008, *Tackling the Climate Crisis at Home and Abroad*, and to make climate adaptation and resilience an essential element of the work we do
- Lays out DOE's guiding principles and priority adaptation actions



2021 Climate Adaptation and Resilience Plan



Report to the White House
National Climate Task Force and
Federal Chief Sustainability Officer
August 2021

DOE has identified five priority adaptation actions:

- 1. Assess Vulnerabilities and Implement Resilience Solutions at DOE Sites**
 - Review and conduct vulnerability assessments
 - Plan, prioritize, and implement resilience solutions
- 2. Enhance Climate Adaptation and Mitigation at DOE Sites**
 - Reduce energy and water use in facilities
 - Deploy clean energy sources and modernize infrastructure
 - Improve ecological and land use management
- 3. Institutionalize Climate Adaptation and Resilience in Policies and Processes**
 - Implement building standards and codes
 - Develop climate-oriented procurement clauses
 - Integrate climate action requirements into established DOE processes
 - Update DOE directives and technical standards
 - Define and communicate resilience roles and responsibilities

DOE has identified five priority adaptation actions:

4. Provide Climate Adaptation Tools, Technical Support, and Climate Science Information

- Building codes for resilience
- High performance computing (HPC) systems for climate simulations and local adaptation planning
- DOE climate vulnerability assessment tools, resources, and training for sites and local communities
- Provide adaptation and resilience support for energy and environmental justice communities near DOE sites

5. Advance Deployment of Emerging Climate Technologies

- Develop, demonstrate, and deploy innovative climate technologies
- Increase awareness of cost-effective resilient technologies

- Update vulnerability assessments at sites [Priority Action (PA) 1]
- Support institutionalization in DOE policies and directives (PA 3)
- Improve energy efficiency and reduce greenhouse gas emissions (PA 1&2)
 - Modernize/upgrade HVAC systems
 - Deploy LED lighting systems complex wide
 - Deploy solar powered exterior lighting
 - Pursue LEED certification for existing and new buildings wherever feasible
- Convert to zero-emission vehicle fleets (PA 1&2)
 - Right-size and convert current fleet to EVs
 - Install charging infrastructure

- Move to renewable and zero-emission energy sources (PA 1&2)
 - Explore installation of on-site zero-emission energy sources (SRS, WIPP, Hanford)
 - Assess conversion of coal-powered steam and electricity plants and facilities to natural gas and biomass
- Address climate-related risks and increase resilience at our sites (PA 1&2)
 - Accelerate D&D for excess facilities
 - Accelerate removal/disposal of hazardous and radioactive waste and contamination
 - Complex-wide, repair and replace degraded roofs
 - Modernize/right-size electric systems and grids

EM's Future: Sustainable & Resilient Sites & Communities



In Conclusion, a Great Opportunity for DOE/EM:

- The CARP provides guidance for EM to incorporate climate change adaptation and mitigation into daily business operations at each site
- Successful implementation of this plan requires collaboration and coordination across EM, with other program offices, and with non-Federal stakeholders
- The priority actions and activities will be incorporated into EM's planning, decision making, operations, and budget processes, including integration within Site Sustainability Plans, D&D, and remedy/clean up selection
- DOE will track, review and revise the CARP to acknowledge successes and lessons learned as well as continue to set ambitious goals
- By creating a sustainable and climate resilient complex, EM ensures its mission continues to be delivered while helping its communities adapt and prepare, as well as promoting energy and environmental justice and well-paying jobs