



The role of government in climate resiliency



Building a better
working world



Abstract

Climate risk poses threats, both physical and economic, for all kinds of government facilities and operations. This paper outlines four no-regrets steps that government can take to anticipate and mitigate these risks.

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1. Introduction

The purpose of this white paper is to present recommended actions for addressing climate risk and enhancing the resiliency of government-operated facilities in regions prone to extreme heat, hurricanes, floods, drought and other physical climate hazards.

2. Problem statement

Physical climate risks affecting government-operated facilities can disrupt the continuation of critical services and place government infrastructure and employees, as well as citizens, in jeopardy.

Government-operated facilities located in the Gulf of Mexico, southwestern US, and northeast US-Canadian border regions face significant climate risks. Understanding the risks faced at these facilities and developing resiliency plans can help protect critical infrastructure and operations, strengthening the US' security and economy. However, traditional methods often fall short in providing a comprehensive understanding of these risks and effective strategies for enhancing resiliency due to the uncertainty and complexity of the challenges.

3. Four no-regrets actions government organizations can take to prepare for growing climate risks

Government organizations can take action to address climate risks by assessing physical risks, strengthening resilience through adaptation measures, protecting the public and contributing to a sustainable and resilient future for their communities. Taking an integrated approach to climate risk assessment can help organizations create targeted interventions that protect vital government services amid the threat of increasing climate change.

Conduct a climate risk assessment:

The EY approach to climate risk management is designed to help guide organizations through their own climate risk journey by leveraging the latest science, tools and risk management approaches to increase organizational resilience. Answering the key questions posed by climate change requires a deep understanding of organizational vulnerabilities, exploration of possible climate futures, and engagement of key stakeholders across various business functions. With the addition of EY geospatial analytics, governments can understand site-specific climate risks and create an integrated approach to climate adaptation that considers infrastructure, health care, and community vulnerability in relation to climate hazards. This unique capability is particularly valuable in assessing growing climate vulnerabilities around the US, such as the increasing vulnerability to extreme heat and extreme precipitation at the US-Mexico border and rising sea levels and hurricane vulnerability in the northeast US-Canadian border region.

Develop an adaptation and mitigation plan:

Adaptation and mitigation measures to address physical climate risks should be aligned to organizational risk management systems and strategic objectives. Through advanced EY tools and methodologies, we provide businesses with insights into vulnerabilities and opportunities for resilience by determining which facilities, infrastructure and regions are most at risk based on the severity of the potential impacts. This prioritization helps allocate resources and focus efforts where they are most urgently needed to develop tailored resiliency plans. For example, responses may include upgrades to building envelopes, strengthening utility systems, flood-proofing measures, installation of backup power systems, and integrating sustainable and climate-resilient design principles.

Analyze costs and benefits:

While identifying the most relevant climate risks to your facilities and potential adaptation and mitigation measures, it is important to evaluate the costs and benefits of potential climate resilience measures to allocate resources effectively. This evaluation should consider both the costs associated with implementing adaptation strategies and the benefits gained from reducing climate risks. EY analytical capabilities and extensive climate risk experience help evaluate the public and private economic and social impacts of climate risk-related investments aligned to the government's priorities.

Engage and communicate with key stakeholders:

Engaging and communicating with relevant stakeholders (such as government officials, facility managers, local communities and subject matter experts) is beneficial for inclusive and actionable decision-making. We recommend involving these stakeholders in the planning process, seeking their input, and sharing the findings from the climate risk assessment to determine a path forward that incorporates the interests of the community. EY geospatial analytics helps facilitate stakeholder engagement by reducing barriers to understanding highly technical information by leveraging maps and visuals. Encouraging collaboration, information exchange and public awareness fosters support and participation in the resiliency efforts.



4. How can Ernst & Young LLP help?

Our multidisciplinary teams work together to develop exceptional climate risk solutions given our EY professionals' diverse range of skills and experience. We offers climate risk modeling and assessment, adaptation and mitigation, cost-benefit analysis, and stakeholder engagement services and platforms to help government facilities protect their critical functions and assets by understanding physical climate impacts.

EY analytical tools for physical climate risk assessment can help governments better understand the potential exposure and vulnerabilities associated with increasing frequency and severity of extreme weather events, as well as constant weather exposure that is crucial for resiliency planning to enable the continuity of government services and safeguarding public safety.

5. Conclusion

Data-driven approaches to assess climate risk and improve resiliency at government-operated facilities are key to building a stronger and more secure US. By adopting the proposed solution and recommendations, governments can effectively safeguard their infrastructure, enhance community resilience, and adapt to the challenges posed by climate change.

Summary:

- ▶ EY analytical tools for physical climate risk assessment can help governments better understand the potential physical climate hazards and vulnerabilities associated with extreme weather events.
- ▶ Governments can better understand potential physical climate hazards and vulnerabilities with EY analytical tools for climate risk assessment.
- ▶ Government-operated facilities vulnerable to climate impacts can build resiliency by understanding climate risks and opportunities, developing adaptation and mitigation plans, performing cost-benefit analysis on potential resiliency measures, and engaging stakeholder to facilitate inclusive decision-making.



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With thanks to David Richardson and Hiba Ahmed

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US SCORE no. 22154-241US
CS no. 2401-4410213

ED None

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