



Can climate risks create opportunities to improve mission effectiveness?

Increasing your agency's resiliency can be rewarding in many ways

Nearly every government agency faces an array of threats to its ability to carry out its mission. Many agencies, for example, depend on technology infrastructures that may be well beyond expected end of life, and finding resources to maintain these fragile systems can be extremely difficult. The vulnerability created by technology obsolescence is clear, easy to understand and easy to communicate to others. It's equally clear how to address the threat, with numerous organizations (including KPMG) offering solutions for migrating agencies to modern, cloud-based systems.

But another threat to federal agencies may be less clear: climate-related challenges. Most agency heads recognize the threat and appreciate the impact that climate has on operations, but many are uncertain how and when to respond—especially when the risk may not be realized until sometime in the future.

But how far away is the future? While climate-related challenges can seem distant, we may already be progressively feeling their effects. The immediate impact of floods and wildfires on agencies such as FEMA or the Forest Service leaps to mind. But what may not be as obvious are the ancillary effects that are slowly yet steadily building. Commercial insurers, for example, have been pulling out of prone areas, leaving the government as the sole insurance option, with many homes underinsured or not insured at all.¹

Research suggests that the growing impact of climate challenges on public health can be significant.² Record-high temperatures, for example, can worsen chronic conditions such as cardiovascular disease, respiratory disease, cerebrovascular disease and diabetes-related conditions.³ Such changes can have both short-term and long-term effects impacting Social Security Disability Insurance, Medicare and Medicaid, and more.⁴

Despite its might, the military is not immune—and indeed may be the most impacted of all. Military facilities are increasingly at risk of damage caused by natural disasters

Why modern government is important

Government agencies in the U.S. must modernize in order to keep up with changing user needs, regulations, and health and public safety requirements. Leaders of modern governments rethink business processes and service delivery models to more effectively achieve their mission. This article is one of a series that features how modernizing affects the government workforce and the user experience, improves security and public trust, and accelerates the digital journey. KPMG team members offer insights intended to help guide governments in their modernization efforts to encompass all processes, technologies, policies, and the workforce so each works together to create connected, powered, and trusted organizations.

such as hurricanes, tornadoes, fires and flooding, and forces can be expected to support civilian populations during these same events. Ultimately, climate effects may drive conflicts, influence battle conditions and affect supply chains.⁵

Preparing for—and becoming more resilient to—climate-driven risks must be a priority for any government agency. The time to start improving resiliency is now.



¹ US Centers for Disease Control and Prevention, June 18, 2020, <https://www.cdc.gov/climateandhealth/effects/wildfires.htm>

² US Department of Health and Human Services, "Climate change and health equity," <https://www.hhs.gov/climate-change-health-equity-environmental-justice/climate-change-health-equity/>

³ US Centers for Disease Control and Prevention, September 1, 2017, <https://www.cdc.gov/disasters/extremeheat/warning.html>

⁴ US Centers for Disease Control and Prevention, June 18, 2020, <https://www.cdc.gov/climateandhealth/effects/wildfires.htm>

⁵ KPMG International, Future of defense, 2022, <https://assets.kpmg.com/content/dam/kpmg/xx/pdf/2022/12/future-of-defense.pdf>





The climate threat from within: climate-resiliency inertia

Despite the significance of climate-related risks, agencies may find it challenging to embark on resiliency and sustainability efforts designed to address them. Overcoming any inertia to such efforts starts with understanding its source.

With any risk that isn't perceived as an immediate threat, there can be a "kick-the-can-down-the-road" mentality, driven less by indifference than by the reality that every dollar spent on long-term resiliency initiatives is a dollar cut from the agency's immediate mission. "Can't fail on my watch" is a powerful motivator to focus on the near-term. This is especially true when the impact of climate-related challenges to the agency's mission can appear to be a decade or more away, or their probability of occurring may be perceived as low or not yet fully understood. Other, more systemic factors can contribute to the inertia. With funding uncertainty from frequently changing political priorities, for example, it can be challenging to embark on climate-resiliency efforts that may take ten or more years to complete.

In many cases, the inertia is present by design, and may more appropriately be labeled "caution." Any substantive change, no matter its goal or intent (including to reduce risk or to increase resiliency or sustainability), will introduce its own set of risks. Converting a fleet of vehicles to electric may help insulate you from fossil fuel supply risks and meet carbon-

reduction mandates, for example, but it will also introduce risks in the infrastructure needed to support it, everything from electric wires to maintenance resources.

The Department of Defense (DoD) may be the most cautious of all, and justifiably so given the critical nature of its mission. But caution isn't limited to the DoD. Despite their diversity, every government agency has a commitment to its mission. Nothing any agency does can jeopardize that mission—it's always "mission first."

Yet climate effects appear to be a growing threat to every agency's mission. The risk of inaction—failing to prepare now for these effects—must be balanced with the risk of any action. Sound strategies, detailed planning and effective risk management capabilities, including AI-based modeling, are essential for moving forward.

Despite these challenges, progress is being made. Decarbonization mandates and the funding available for climate investments through the Inflation Reduction Act and other sources are spurring many agencies to act now. Many of the actions they're considering can reduce an agency's carbon footprint and can also greatly improve its resiliency against climate-related risks and other threats. For example, a solar array can isolate a facility from power outages caused by everything from wildfires to cars striking utility poles.



Developing a long-term vision

Given their timelines for execution, which can span a decade or more, climate-resiliency strategies require long-term vision. Such long-term strategies may be unusual in the public sector but are much more common in the private sector. For example, while commercial enterprises must react to near-term pressures, they are also likely to have a long-term strategic plan, where every decision and dollar spent are measured against that yardstick. Built-in incentives may encourage sacrificing short-term advances for larger long-term gains. Several automakers, for example, have announced plans to produce only electric cars by 2030 or 2040—a major shift that requires decisions and investments made today to consider that goal.⁶

Simply developing your 10-year plan is already a huge step toward breaking the grip of resiliency inertia, but it's only the start. Government leaders must consider how to provide incentives for everyone to think and act more in the long term in order to help ensure that these plans are realized, not just at the macro level but also at the personal level, throughout the agency's ranks.

⁶ Jimmy Motavalli, "Every Automaker's EV Plans Through 2035 And Beyond," Forbes, October 4, 2021



Looking for opportunities

Even if they're already laying the groundwork to address a future threat, many agencies tend to approach resiliency purely as a defensive measure. This is understandable—the very definition of “resiliency” is the ability to withstand a difficult condition or challenge. Naturally, agency heads tend to react to potential risks by strengthening their defenses against them.

But resiliency efforts can yield benefits beyond resilience. Realizing these benefits requires taking the next step and going on offense, seeking ways to leverage these risks to improve mission effectiveness. As they say, necessity is the mother of invention, and every challenge is an opportunity. The private sector has mastered the art of leveraging risk for gain, and it's becoming increasingly difficult to find a profit-driven enterprise whose long-term plan to address climate-related threats doesn't involve proactively seeking to take advantage of them.

Typically, underlying any such planning in the private sector is a return-on-investment (ROI) calculation, which can help provide both justification and incentive for prioritizing the long term over the short. They'll also do a cost-benefit analysis (CBA), which is designed to consider “softer” aspects—non-financial costs and benefits that are more difficult to quantify than finances alone. Identifying these benefits is an integral part of their planning and decision-making processes—most investment decisions hinge solely on the ability to justify them.

In the public sector, such financial or profit-driven justifications are superseded by mission priorities. While agencies can't take the risks that commercial firms can, nor do they have the freedom or agility to shift their missions as private sector

organizations do, when considering climate resiliency or sustainability projects, agencies can still ask the question, “are there benefits beyond resiliency?” and be willing to explore the possibilities.

Several state prison systems have done just that by installing solar panels. With many extra acres of unused land, much of it can be used to produce electricity in excess of the needs of the prison itself, generating income for the state.⁷ Agencies may consider a small-scale proof-of-principal effort that could help identify or confirm the validity of such opportunities early in the process.

Wherever it makes sense, back each plan with a *resilience* ROI calculation and CBA to understand and quantify the benefits. While the motivation may be different in the public sector than the private sector, financial projections and the anticipated impact on mission effectiveness are still critical components in decision-making. Resiliency expenditures can be quite justifiable—and often far less costly than you might think. A sound and defensible long-term plan can easily make the need and the value obvious, not only in financial terms but also in terms of furthering your mission.

It also works in the other direction. Agencies may already have significant transformation or modernization efforts underway that can be leveraged to enhance climate resiliency, provided they apply the proper lens to identify and act on these opportunities. Smart warehousing and supply-chain optimization, for example, are ripe with such opportunities for both enhancing mission effectiveness and addressing climate-related challenges. Identifying climate-vulnerable parts of the chain or opportunities to improve sustainability should be considerations in any optimization decision.

⁷ “State prisons harness the power of solar energy,” Energy Digital magazine, May 2020



Data, data, data

Data is an essential ingredient for identifying climate-related vulnerabilities and opportunities, including the data analytics skills and supporting technologies needed to collect, integrate, manage, analyze and secure it. They're essential for developing the financial and effectiveness projections that can support and defend your plans. They're also needed to meet reporting requirements that often accompany resiliency or sustainability efforts. If you're lacking these capabilities, this may need to become a short-term priority.

One of the biggest challenges specific to climate resiliency efforts can be the need for access to new data and new sources of data, including external sources. For example, in the past, it may not have mattered where a part and all of its constituent components were sourced as long as it reliably arrived at your loading dock. Now, having visibility into the long tail of this supply chain may be essential, including the exact location of manufacture and method of transportation of all those components.

Here, too, the ancillary benefits beyond climate resiliency become apparent. Knowing not only that factories may be in increasingly vulnerable locations but also that a key component may come from a country with a tenuous relationship with the US may influence sourcing decisions.

Data tools can be extremely powerful. For example, digital twins—AI-powered virtual models of complex, real-world systems—can help simulate future conditions; test current, planned, and alternative responses; and help shape policy decisions optimized for effectiveness.

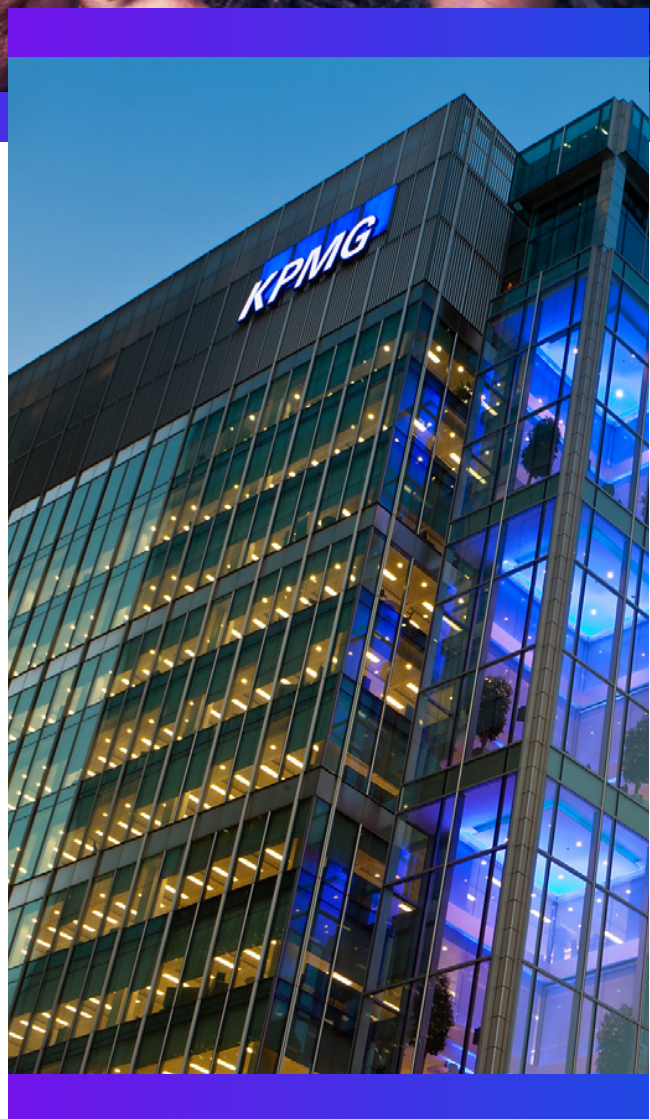


How KPMG can help

Building resiliency—especially against the threats posed by the climate—doesn't have to be a purely defensive action; it can be rewarding in many ways.

KPMG has deep and wide experience supporting resiliency and sustainability efforts. We have worked with numerous government agencies at all levels to help plan and develop strategies for resiliency initiatives. We can help you assess your risks and map a pathway to achieve target performance standards. Our Advisory and Technology professionals, our modeling, simulation, and sustainability journey tools, and our access to third-party and alliance data can all help you advance your resiliency efforts, wherever you are in your process.

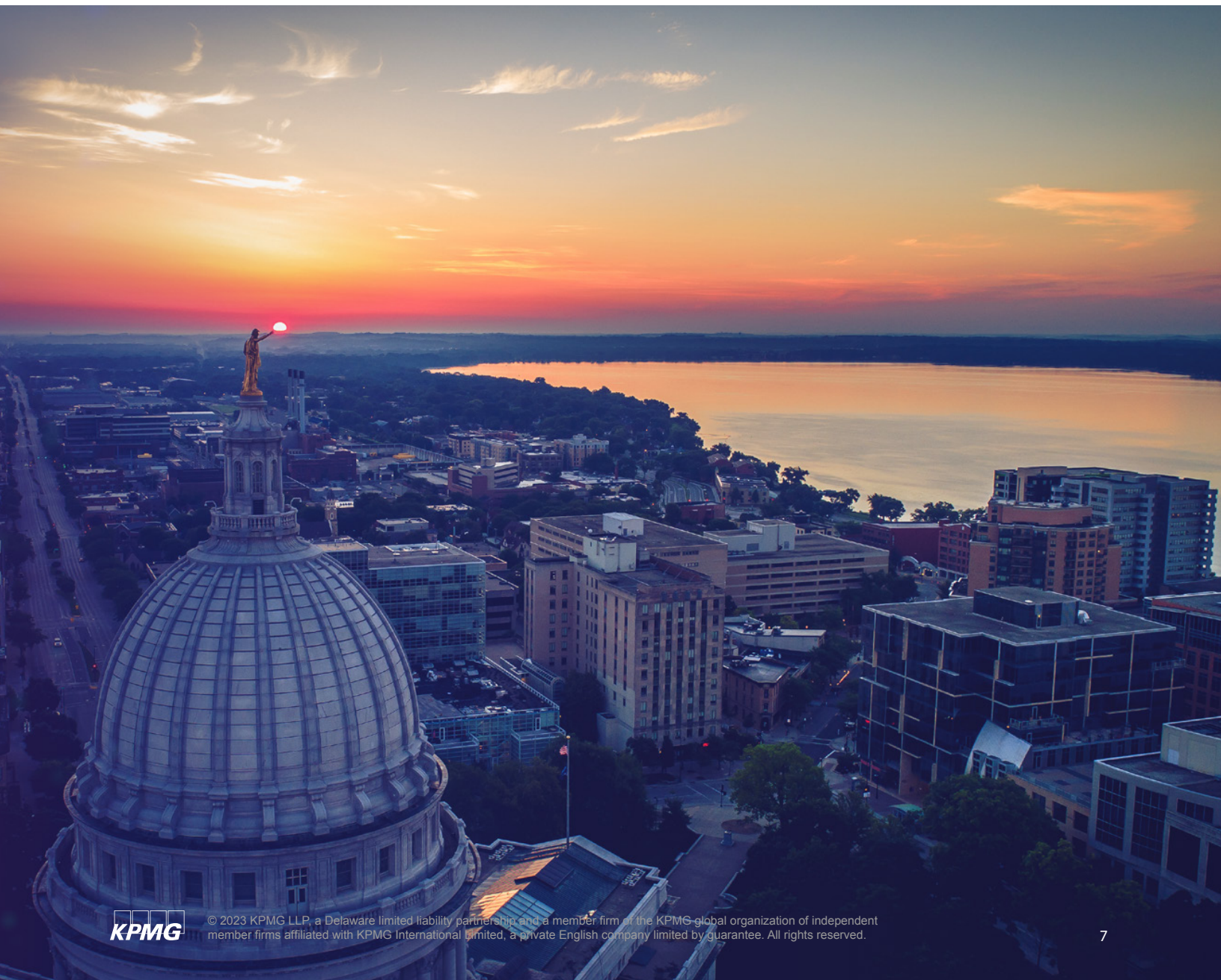
Whether it's helping you lead a sustainability effort, risk mitigation, or digital transformation, KPMG creates tailored data-driven solutions that help you deliver value, drive innovation, and build stakeholder trust.



About KPMG

KPMG has worked with federal, state, and local governments for more than a century, so we know how agencies work. Our team understands the unique issues, pressures, and challenges you encounter in the journey to modernize. We draw on our government operations knowledge to offer methodologies tailored to help you overcome these challenges and work with you from beginning to end to deliver the results that matter.

The KPMG team starts with the business issue before we determine the solution because we understand the ultimate mission. When the way people work changes, our team brings the leading training practices to make sure your employees have the right knowledge and skills. We also help your people get value out of technology while also assisting with cloud, advanced analytics, intelligent automation, and cybersecurity. Our passion is to create value, inspire trust, and help government clients deliver better experiences to workers, citizens, and communities.



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