U.S. DEPARTMENT *of* STATE

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CLIMATE ADAPTATION AND RESILIENCE PLAN

2021

U.S. Embassy London

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U.S. DEPARTMENT OF STATE AGENCY POLICY FOR CLIMATE ADAPTATION AND RESILIENCE

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Climate change poses a significant threat to the Department of State's mission of advancing the interests, health, safety, and economic prosperity of the American people. The increasing frequency and severity of climate-related natural disasters disrupt ongoing operations and threaten our ability to advance foreign policy goals. It is the policy of the Biden Administration to organize and deploy the full capacity of its agencies to combat the climate crisis. The Department of State fully embraces the Administration's focus on climate change, and Secretary Blinken named climate security and resilience as one of his top strategic priorities. I encourage all Department entities to implement this plan and related actions to ensure that this agency is a global leader in climate resilience and adaptation.

The Department of State will put the climate crisis at the center of our foreign policy by integrating climate change adaptation and resilience into our global management platform. The goals of this overarching policy are three-fold:

1. Protect the health and safety of our personnel;
2. Ensure the continuity of services and diplomacy by preparing for and mitigating the impact of climate change on our people, facilities, operations, and supply chains; and
3. Lead by example through showcasing resilience and adaptation solutions in our facilities and operations.

To achieve these goals, the Department will:

- Prioritize completing actions outlined in the annual Climate Adaptation and Resilience Plan, the Sustainability Plan, and related executive orders and statutes.
- Integrate climate adaptation and resilience into agency strategies and policies, including the Joint Strategic Plan, applicable bureau strategies, Integrated Country Strategies, Bureau Resource Requests, the IT Strategic Plan, and the Enterprise Data Strategy.
- Identify baseline capabilities and priority areas for investment in additional staff, resources, and training.
- Prioritize addressing climate risks in planning for emergency management, mobility, infrastructure and building readiness, supply chain, and host nation engagement and collaboration.

This plan is applicable to all domestic and overseas operations. It is effective immediately and will remain in effect until amended, superseded, or revoked.

Brian P. McKeon
U.S. Deputy Secretary of State for Management and Resources

INTRODUCTION

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Executive Order 14008 states "we face a climate crisis that threatens our people and communities, public health and economy, and, starkly, our ability to live on planet Earth." With a global footprint that supports critical foreign policy and national security work, American citizen services, and humanitarian assistance, the Department of State's ability to achieve its mission will be inevitably impacted by climate change. In fact, it is already happening - from hurricanes that took State facilities offline in Charleston, South Carolina, to severe drought in Johannesburg, South Africa that required the installation of additional boreholes and water efficiency measures at the consulate, the increasing severity and frequency of natural disasters around the world has required the Department to adapt in order to sustain ongoing operations.

The Department has three overarching climate adaptation and resilience goals: (1) protect the health and safety of personnel, (2) adapt Department facilities, operations, and mission-critical services to be more resilient, and (3) lead by example through showcasing climate adaptation and resilience solutions. Known challenges include limited climate related expertise within the management workforce to implement priority actions, the Department's reliance on local infrastructure to provide mission critical supplies, such as electricity and water, and a lack of granular data in many areas overseas that lead to uncertainties regarding future climate impacts.

The plan contains the Department's five initial priority actions to advance the Department's resilience and adaptation to climate change. These priority adaptation actions include enhancing mobility, updating emergency preparedness assessments, enabling climate-ready sites and facilities, evaluating supply chain and procurement, and improving local infrastructure through host country engagement.

An essential enabler to achieving these five goals will be creating decision support tools that help track and identify the most at-risk facilities, supplies, and relevant local infrastructure in order to prioritize resources and action. In 2022, the Department will conduct its first climate vulnerability assessment for overseas facilities using a newly developed tool, the Climate Hazards Dashboard, which will provide greater insight into the risks posed at our embassies and consulates around the world. The Department will continue to build decision support tools that leverage internal datasets, such as real-time power quality, air quality, and electricity data available via the Greening Diplomacy Initiative Internet of Things Network (IoT), as well as external datasets from our interagency and host nation partners.

The Climate Adaptation and Resilience Plan complements the Sustainability Plan, which specifies metrics for measuring our progress to achieve the Department's and Administration's environmental and climate goals.

RESPONSIBLE AGENCY OFFICIAL

The responsible agency official is the Department's Chief Sustainability Officer (CSO), the Under Secretary for Management. The CSO is supported by the Deputy Chief Sustainability Officer in the Office of Management Strategy and Solutions (M|SS).

CLIMATE ADAPTATION AND RESILIENCE PLAN SUMMARY

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The U.S. Department of State has three overarching climate adaptation and resilience goals: 1) protect the health and safety of personnel, 2) adapt Department facilities, operations, and mission-critical services to be more resilient to the impacts of climate change, and 3) lead by example through showcasing climate adaptation and resilience solutions. The following five priority actions support achieving these goals.

THEMES	GOALS	TARGETS
Enhanced Mobility	**Utilize mobility, domestic telework, and remote access to systems and services to enable continuity of operations, reduced risk to personnel, and support mission delivery.**	**FY22** • **Continue to expand access to hardware, software, and other programs to expand and enhance telework and flexibilities** • **Launch online passport renewal service**
Emergency Preparedness	**Include climate hazards in emergency planning.**	**FY22** • **Identify and prioritize posts most at-risk from climate impacts for consultation** • **Update emergency management policy and planning to include climate risks**
Facilities Readiness	Screen facilities for climate hazards to identify which to prioritize for further assessment and intervention.	**FY22** • **Conduct initial overseas portfolio baseline screening to identify at-risk facilities** • **Create a list of most at-risk facilities for more in-depth assessment and/or adaptation efforts**
Supply Chain Resilience	**Identify and reduce climate vulnerabilities in the Department's mission-critical supply chain, ensure continuous operations during emergencies, and develop guidance and strategies for programs to integrate sustainable procurement.**	**FY22** • **Use GSA Supply Chain Climate Risk Management** • **Framework to assess mission critical supply chains for vulnerabilities** • **Update guidance for procurement specialists and program offices**
Host Nation Engagement	**Use eco-diplomacy platforms to share best practices, establish joint projects with host nations to improve resilience, and demonstrate U.S. climate leadership.**	**FY22** • **Guided by the overseas portfolio baseline screening for at-risk facilities, begin to engage host countries, through the Greening Government Initiative and Eco-Capitals Forum, to advance mutual adaptation priorities**

PRIORITY ADAPTATION ACTIONS

I. ENHANCING MOBILITY AND REMOTE ACCESS FOR DIPLOMATS AND CITIZENS

ACTION DETAILS

- **Action Description:** The Department will 1) use a data-informed process, the Mobility Assessment Tool, to make decisions about domestic telework for the future of work at State; 2) continually assess optimization options for the domestic real estate footprint; and 3) expand remote access to, and automation of, relevant systems and services to enable mobility and remote support for missions impacted by climate change.
- **Action Goal:** Protect the Department's continuity of operations and reduce risk to personnel and facilities during climate and other emergencies through enhancing flexibility, telework, and remote access to systems and services.
- **Risk or Opportunity:** Improving the flexibility of our workforce will improve the Department's resilience to climate change-related disasters. These events may disrupt the ability of staff and customers to safely get to our facilities and/or engage our services. This disruption is compounded when disasters adversely impact infrastructure. Increasing telework may also limit employee exposure to health and safety risks during severe events.
- **Scale:** Global.
- **Timeframe:** Major projects related to this goal will be completed through FY2023.
  - A pilot program to issue laptops to employees via a centrally funded mechanism is projected to be completed by the end of 2021.
  - An assessment of all domestic positions for their maximum telework eligibility will be completed by October 2021.
  - An assessment of mobility implications in design and construction standards for the domestic real estate footprint will be completed in FY2022.
  - Expanding remote access to systems and automating processes is ongoing; one key project is online passport renewal, which is expected to launch in FY2022.
  - Design and construction for two domestic mobility hub pilots at the Harry S. Truman building are anticipated to be completed in FY2021 and FY2023.

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ADAPTATION ACTION:
Enhancing Mobility and Remote Access

AGENCY LEADS:
Office of Management Strategy and Solutions; Bureau of Information Resource Management; Bureau of Global Talent Management; Bureau of Consular Affairs

SUPPORTING AGENCY OFFICES:
Bureau of Administration; Bureau of Overseas Buildings Operations; Regional Bureaus

BACKGROUND:
Climate change presents both acute and long-term challenges for ongoing operations and achieving key Department missions, such as American Citizen Services and diplomatic engagement. Providing diplomats with remote access to services and systems and increased mobility helps the Department achieve its mission even when personnel must evacuate, or facility operations are impacted. Climate change-related disasters often create greater demand for consular services, humanitarian assistance to support aid and recovery, and management services to support personnel and families. Enhancing flexibilities for the workforce, including expanding telework and remote access, and select automation of systems, can support continuity of operations, result in reduced risks to personnel, and ensure services can be continually accessed by U.S. citizens. These efforts align with the Department's ongoing work to revitalize the national security and foreign policy workforce in line with the President's National Security Memorandum 3 on Revitalizing the Foreign Policy and National Security Workforce (NSM-3) and the Office of Management and Budget's Future of Work efforts. This priority action applies to domestic and overseas operations.

- **Implementation Methods:** For the domestic workforce, the Department is using a Mobility Assessment Tool (MAT), a standard, quantitative survey to determine telework frequency for domestic positions. Overseas, post leadership are receiving a "telework toolkit" and templates to develop and implement situational telework policies for both U.S. direct hires and locally employed (LE) staff based on unique mission characteristics, local conditions, and labor laws of their post. The results of the MAT and overseas telework policies will help institutionalize long term work flexibilities to enable a mobile workforce.
- **Performance:** Performance will be tracked through key indicators, such as the percentage of domestic positions categorized as eligible for telework; the number of new telework agreements after MAT process completion; the ratio of telework eligibility versus in-office work; number of remotely accessible applications and automated business processes; percentage of domestic employees that are desk sharing or hoteling; and adoption rate of online passport renewal service.
- **Intergovernmental Coordination:** The Department participates in interagency working groups, such as the President's Management Council, Chief Data Officer Council, Chief Human Capital Officer Council, and interagency groups focused on the Future of Work. The Bureau of Overseas Buildings Operations (OBO) and the Bureau of Administration, as members of the Federal Real Property Council, coordinate and collaborate with GSA, OMB, and all other Federal Agencies holding real property to implement best practices, improve sustainability, and decrease the domestic footprint by enabling telework.
- **Resource Implications:**
  - Sustained investment in infrastructure, equipment, and systems/program modifications, such as hoteling software or bureau space allocation, is needed to increase telework and continued expansion of remote access.
  - The Bureau of Administration is reviewing how to effectively right-size domestic space; redesign and retrofit space for resilience, sustainability, and mobility; and support related operations and maintenance.
  - CA is primarily fee-funded, and as a result of workload decreases tied to the COVID-19 pandemic, fee revenue decreased sharply and is not expected to rebound to pre-pandemic levels before FY2024. This revenue loss may delay broader rollout of remote services or impact the response to climate-related disasters.
- **Challenges/Further Considerations:** Deploying mobility hardware and software solutions to personnel will require ongoing cybersecurity oversight and investments.
- **Highlights of Accomplishments to Date:**
  - Completed a course for supervisor training for managing a virtual workforce, a "bring your own device" policy, and a toolkit consolidating all Department mobility resources.
  - Initiated a pilot to provide laptops with central funding desktops for 900 employees.
  - Initiated two pilot programs for mobility hubs in domestic space including accelerating Wi-Fi accessibility in the Harry S. Truman building.
  - Implemented the first module of Archibus, real property management software that will lead to a hoteling capability for domestic real property.
  - Completed a pilot of the Mobility Assessment Tool, which establishes a data-informed approach to employee telework levels.
  - Created the CA Remote Assistance Team to help posts with virtual work such as email triage and pre-screening of visa applications.
  - Automated business processes and improved remote access for virtual oaths of office, Time and Attendance, Entry on Duty, electronic payments, helpdesk support, clearances processes, and Consular Affairs citizen-facing processes such as the Electronic Consular Report of Birth Abroad.

II. EMERGENCY PREPAREDNESS/ACTION ASSESSMENTS AND UPDATES

ACTION DETAILS

- **Action Description:** The Department's crisis management practitioners and stakeholders, to include the offices listed above, will continue to review and update emergency management policies. The policies will evolve as the risk environment changes and new threats emerge. The Department will utilize decision support tools and consult with crisis management practitioners and stakeholders to add specific climate language to emergency management policies. The Department will assess the feasibility of determining risk thresholds based on climate risk severity.
- **Action Goal:** Prepare for climate risks by including climate hazards in emergency management activities and strategic planning efforts.
- **Risk or Opportunity:** Where applicable, climate related hazards are addressed in posts' emergency preparedness activities. Additional subject matter expertise and bandwidth is needed to support ongoing analysis to improve climate risk integration into emergency preparedness activities. Deliberate planning helps posts prioritize preparedness activities to reduce health and safety risks for personnel and operational disruptions.
- **Scale:** The Department is responsible for emergency management oversight to ensure the safety of the U.S. government workforce and family members under Chief of Mission authority at over 270 overseas posts.

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ADAPTATION ACTION:
Overseas Emergency Preparedness Assessments and Updates

AGENCY LEADS:
Agency lead to be determined pending internal review of authorities to direct

SUPPORTING AGENCY OFFICES:
Bureau of Diplomatic Security; Bureau of Overseas Buildings Operations (OBO); Bureau of Consular Affairs; Bureau of Global Talent Management; Bureau of Administration; Foreign Service Institute's Leadership and Management School's Crisis Management Training (FSI/LMS/CMT); Bureau of Medical Services; Regional Bureaus; Executive Secretariat's Office of Crisis Management and Strategy (S/ES-O-CMS)

BACKGROUND:
The Department of State is responsible for the direction, coordination, and supervision of the planning and management of emergencies and crises for agencies under Chief of Mission authority overseas. Post's group of leading subject matter experts (SMEs) overseas provide recommendations to the Chief of Mission/Principal Officer (COM/PO) for preparation and response to potential risks to the health, safety, and security of post personnel and private U.S. citizens abroad. The Crisis Management Council (CMC) is an existing group that brings together crisis management practitioners and stakeholders across the Department aimed at improving Department and U.S. diplomatic personnel capabilities to manage risk, prepare for, and respond to crises abroad. The Bureau of Diplomatic Security (DS) focuses on security related aspects of emergency planning matters, consistent with the Omnibus Diplomatic Security and Antiterrorism Act's focus on security for U.S. government personnel assigned to U.S. missions overseas. DS also maintains emergency management policy and provides a framework for post leadership to develop Emergency Action Plans (EAPs). From an emergency planning perspective, natural disaster and weather-related events are assessed at the post level. If post determines a hazard-specific response plan is necessary, it is documented in the custom content section in the EAP. Additionally, these risks are addressed in the standard EAP response plans and, include guidance for assisting U.S. citizens and host nations and for post drawdown and evacuation procedures. The Foreign Service Institute (FSI) conducts training with posts to create awareness and enhance preparedness.

The Department is working to identify the appropriate organization(s) to lead the below adaptation action within existing authorities or establish new authorities to integrate strategic climate considerations into emergency preparedness.

- **Timeframe:** By Q3 FY2022, the Department will begin use of the Climate Hazards Dashboard in consultation with the Department's Climate Security & Resilience Program Office to identify posts with the highest climate risks and conduct consultations for preparedness actions.
- **Implementation Methods:** The Department will update emergency management guidance to include guidance for emergency action plans as required. Furthermore, S/ES-O/CMS will continue to coordinate the Department's Committee on Overseas Risk Evaluation (CORE) to serve as an additional planning and preparedness function for posts by reviewing posts' risks and mitigation tools. Posts will conduct climate-related preparedness activities as needed.
- **Performance:** Number of EAPs integrating acute-onset climate events, as needed, based on risk assessment conducted through the Climate Hazards Dashboard in consultation with the Climate Security & Resilience Program Office.
- **Intergovernmental Coordination:** The Department participates in interagency exercises. All overseas U.S. government personnel under Chief of Mission authority participate in Department emergency preparedness activities.
- **Resource Implications:** Continued work to expand the Climate Hazards Dashboard and conduct risk assessments is needed, which requires subject matter expertise and dedicated staff.
- **Highlights of Accomplishments to Date:** DS/HTP/SP Emergency Planning Unit continues to collaborate with SMEs to develop a wildfire/air quality exemplar. This exemplar is being developed because a need was identified after a largescale wildfire event affected an overseas post.

III. PROGRAM BUILDING TO SUPPORT CLIMATE-READY SITES AND FACILITIES

ADAPTATION ACTION:
Climate-Ready Sites and Facilities – Program Building

AGENCY LEAD:
Bureau of Overseas Buildings Operations, Bureau of Administration

SUPPORTING AGENCY OFFICES:
Office of Management Strategy and Solutions; Regional Bureaus

BACKGROUND:
The Department accounts for natural hazards in the planning and design of its facilities through traditional design standards and standard operating procedures. The Department must ensure climate risks are assessed and integrated into its infrastructure planning. The Department has several new initiatives to develop data and analytics decision support tools to proactively identify emerging threats to its portfolio of more than 25,000 domestic and overseas real property assets across nearly every country. These tools will help prioritize efforts to increase resilience.

ACTION DETAILS

- **Action Description:** The Department will continue to build and expand decision support tools to assess and screen facilities for climate hazards and identify potential interventions.
- **Action Goal:** Using internal and external climate data, assess facilities to identify the most at-risk to climate hazards.
- **Risk or Opportunity:** Climate hazards can be a significant threat to diplomatic safety and security, government investments, and mission continuity. The best available climate and natural hazard data will drive threat analysis and scenario planning that must be continually integrated into new facility design and maintenance and retrofitting of existing facilities.
- **Scale:** This action covers domestic and overseas facilities managed by the Bureau of Administration and the Bureau of Overseas Buildings Operations, respectively.
- **Timeframe:** In 2022, the Climate Security & Resilience Program Office (CS&R) in the Bureau of Overseas Buildings Operations (OBO) plans to complete its baseline overseas portfolio screening assessment. The Department plans to leverage additional data from existing Internet of Things (IoT) devices, such as power quality data from MeterNet, to provide additional insights for climate risk mitigation.
- **Implementation Methods:** CS&R will continue to expand the dashboard to account for additional hazards and seek opportunities to coordinate policy with other Bureaus and agencies to best identify vulnerabilities to the Department's facilities. The Bureau of Administration will continue to assess domestic facilities for vulnerabilities and collaborate to ensure consolidated reporting. The Department will identify the resources and timeline needed for implementation of a domestic dashboard.
- **Performance:** The number of study and/or project requirements impacted and/or elevated based on results of this screening level assessment.
- **Intergovernmental Coordination:** CS&R's long-term plan incorporates interagency collaboration, such as with the General Services Administration (GSA), Department of Defense (DoD), National Geospatial-Intelligence Agency (NGA), National Oceanic and Atmospheric Administration (NOAA), U.S. Geological Survey (USGS), National Aeronautics and Space Administration (NASA), and the U.S. Agency for International Development (USAID). These partnerships should result in efficient use of government resources to bring forth best-in-class hazard exposure datasets and subject-matter best practices.
- **Resource Implications and Challenges/Further Considerations:** The Department needs additional dedicated expertise, including data scientists, engineers, analysts, and health experts, to analyze data and help implement associated program changes.

- **Highlights of Accomplishments to Date:**
  - Since FY2019, the Greening Diplomacy Initiative (GDI) and OBO have partnered on the Resilience Innovation Grant as part of the GDI Awards. Each year since FY2019, $1M is provided to overseas diplomatic posts to implement projects that improve their climate resilience and adapt to ongoing climate change impacts. Funded projects include greywater systems, solar arrays, and the installation of water boreholes with solar-powered pumps to improve availability of water. This award also helps to encourage climate literacy and employee engagement through providing an avenue for employees to identify and act on climate needs.
  - The Department has nearly 60 LEED certified buildings. As the newer versions of LEED contain points for resilience, the Department will evaluate whether these points meet our resilience needs for new constructions and major retrofits.
  - In 2020, the Department created a Climate Security & Resilience Program Office (CS&R) in OBO. At that time, CS&R conducted an initial planning exercise with broad representation from stakeholders within OBO that established fundamental goals as well as guidelines for the program's involvement with existing processes.
  - CS&R created a Climate Hazards Dashboard in 2020 to serve as the central repository for global-level climate hazard information as well as site-specific hazard exposure assessment maps as they are developed and made available.
  - In the FY2020 sustainability survey to overseas posts, the Department included questions on natural hazards, including climate-related issues such as flooding and drought. The Department will incorporate post-identified climate hazards into its short and long-term planning and decision support tools.
  - Representatives from the Department's CS&R program are participating with others in DoD's current update to their 2016 Defense Sea Level Rise (DSLR) database. CS&R is also participating in a Federal Adaptation and Resilience Working Group (FARG), hosted by the U.S. Global Change Research Program (USGCRP).
  - Partnerships with NGA began in FY2021 to obtain topography and bathymetry information at select overseas locations for conducting detailed flood studies in support of capital projects.
  - Coastal flood studies are underway with NOAA's Office of Coastal Survey to better understand the impact that coastal flooding events have on overseas coastal-located Department missions.
  - To date, there are 25 posts with the chancery and/or the Chief of Mission Residences designated by the National Wildlife Federation as Certified Wildlife Habitats in recognition of their efforts to provide habitat for pollinators and other wildlife by, inter alia, planting locally native plants that supply food, shelter, and other benefits that support biodiversity and are adapted to local conditions, fostering climate resilience.

IV. SUPPLY CHAIN AND PROCUREMENT EVALUATION

ADAPTATION ACTION:
Supply Chain and Procurement Evaluation

AGENCY LEAD:
Bureau of Administration

SUPPORTING AGENCY OFFICES:
Office of Management Strategy and Solutions; Bureau of Overseas Buildings Operations; Bureau of Diplomatic Security; Regional Bureaus

BACKGROUND:
The Department relies on a complex system to ensure mission critical supplies are available when and where needed. Local supplies, including water, food, and electricity, that Department facilities rely on could be impacted by climate disasters. Supply chain disruptions may also be exacerbated by workforce strikes, terrorism, or other disruptive events that could be worsened by the impacts of climate change. Other mission critical supplies, such as IT equipment, construction materials, and medical supplies, have global supply chains subject to climate emergencies that must be mitigated.

ACTION DETAILS

- **Action Description:** The Department must assess which mission-critical supplies are most at risk from climate impacts and establish long-term risk mitigation strategies. Actions may include consolidating and regionalizing services to reduce exposure to climate risks; securing vendors that have climate risk mitigation plans; and creating procurement guidance for program offices.
- **Action Goal:** Identify and reduce climate vulnerabilities in the Department's mission-critical supply chain and ensure continuous operations during emergencies.
- **Risk or Opportunity:** The Department's local and global supply chains are at risk from acute climate impacts.
- **Scale:** Global.
- **Timeframe:** The Department will complete the assessment of the impacts of climate change on mission critical supply chains in FY2022. The Department will work with OMB and GSA to produce updated guidance for procurement specialists by Q3 FY2022.
- **Implementation Methods:** The Department will utilize GSA's Supply Chain Climate Risk Management Framework to assess and determine the risk impact, likelihood, and risk tolerance for mission critical supplies. Pending assessment results, the Department will review contracts for mission critical supplies to incorporate findings into the Business Process Analysis and Business Impact Analysis for major procurements.
- **Performance:** Performance will be measured by the completion of the supply chain climate risk management framework during FY2022; integration of the results into Business Process and Impact Analysis; and the development of employee guidance.
- **Intergovernmental Coordination:** When necessary, the Department will coordinate with other agencies who share similar risks or supply needs, such as GSA, DHS, and DoD.
- **Resource Implications:** The Department will leverage existing climate working groups to contribute to discussions and assessments on supply chain issues.
- **Challenges/Further Considerations:** Due to the complexity of managing global and localized supply chains at more than 270 locations, the Department is not able to identify and assess all potential vectors at each location. Sustainable and resilient supply chains also require collaboration that leverages other large agencies, such as the Department of Defense, and external stakeholders like the private sector.
- **Highlights of Accomplishments to Date:** The Community of Interest for supply chain risk management engages stakeholders from Department offices and bureaus and meets regularly.

V. IMPROVING LOCAL INFRASTRUCTURE THROUGH HOST COUNTRY ENGAGEMENT

ADAPTATION ACTION:
Improving Local Infrastructure Through Host Country Engagement

AGENCY LEAD:
U.S. Diplomatic Missions; Office of Management Strategy and Solutions; Bureau of Oceans and International Environmental and Scientific Affairs (OES); Office of Special Presidential Envoy on Climate (SPEC)

SUPPORTING AGENCY OFFICES:
Bureau of Overseas Building Operations; Regional Bureaus

BACKGROUND:
While the Department has limited authority over local systems and infrastructure, we are uniquely positioned to leverage our diplomatic platform to influence and work with host communities to improve local adaptation and resilience efforts. By sharing resources, the Department and host communities can achieve mutually beneficial resilience improvements to infrastructure. The Department will leverage bilateral and multilateral forums, such as the Greening Government Initiative and the Department's Eco-Capitals Forum, to engage with host country governments, civil society, and international organizations to identify areas of cooperation on localized climate adaptation and resilience and emergency preparedness.

ACTION DETAILS

- **Action Description:** Use eco-diplomacy platforms to share best practices and establish joint projects with host nations to improve resilience. The Department will also seek to share relevant climate hazard data sets with partners to encourage informed decision-making.
- **Action Goal:** Use eco-diplomacy platforms to share best practices, establish joint projects with host nations to improve resilience, and demonstrate U.S. climate leadership.
- **Risk or Opportunity:** Without coordinated outreach to host nations and communities, the Department risks duplicative adaptation and resilience investments or a lack of preparedness for near and long-term climate impacts. Many of the physical improvements for safety and security will be reliant upon a host country government's capacity to implement and the availability of Department funds and personnel.
- **Scale:** The scale of this effort is global, but engagement will be directed towards priority locations as determined by a vulnerability assessment.
- **Timeframe:** The Department will conduct a baseline overseas portfolio screening assessment to identify the most at-risk overseas locations by FY2022.
- **Implementation Methods:** The Department will integrate host country engagement on climate adaptation and resilience related to Department operations into Integrated Country Strategies and Regional Bureau Strategies. Beginning in FY2022, the Department will identify our most at-risk critical assets and engage with host countries as needed on advancing their climate adaptation priorities.
- **Performance:** The Department will track number of activities and joint projects.
- **Intergovernmental Coordination:** The Department will engage with other agencies as needed to support cooperation for climate resilience and adaptation.
- **Resource Implications:** The Department requires adequate staff and training to conduct assessments of local infrastructure, identify priority areas of collaboration, and share technical expertise as well as staff to support ECF and GGI.
- **Challenges/Further Considerations:** Overseas, engaging with host country governments on climate adaptation and resilience will require coordination across the Mission. Because host nation action is required to improve climate resilience, the Department does not have authority over host country implementation of climate adaptation efforts.

- **Highlights of Accomplishments to Date:**
  - The Greening Diplomacy Initiative (GDI) shares best practices from Green Teams on engagement with host communities on resilience and sustainability. GDI and OBO have committed nearly $3M via the Resilience Innovation Grant to identify and fund small to medium scale projects that improve climate resilience.
  - GDI supported the White House in the launch of the Greening Government Initiative (GGI). One hundred countries have provided contacts to participate in GGI events.

ADAPTING TO CHANGE

Devastating droughts in South Africa in 2018 led to rapidly dwindling water supplies in Cape Town. The U.S. Consulate General got to work by installing a treatment plant on the facility boreholes and rainwater harvesting tanks, bringing in experts to advise the local government, and reducing use of municipal water consumption by 70 percent. The U.S. Consulate General in Johannesburg also depended on a dwindling municipal water supply to support its operations. In 2020, the Consulate General won a Resilience Innovation Grant, funded by OBO via the GDI Awards, to install a rainwater recovery and treatment system to increase resilience and reduce its impact on the local infrastructure. CG Cape Town is also designated by the National Wildlife Federation as a Certified Wildlife Habitat in recognition of its support for pollinators and other local wildlife.

THE 2019 RESILIENCE GRANT HELPED PAY FOR THE INSTALLATION OF A NEW RAIN WATER SYSTEM FOR THE U.S. CONSULATE GENERAL JOHANNESBURG'S GARDENS. (PHOTO COURTESY OF U.S. CONSULATE GENERAL JOHANNESBURG)

TOPIC AREAS

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Per instructions from the Council on Environmental Quality, the following information is provided on specific vulnerabilities and climate literacy efforts.

CLIMATE VULNERABILITY ASSESSMENTS

The Department's first climate vulnerability assessment tool, the Climate Hazards Dashboard, references the same resources as the Fourth National Climate Assessment (NCA4) to display present-day information for extreme wind, flooding (coastal and riverine), extreme heat, and water stress. For some of these hazards, the dashboard provides projections for 2035, 2065, and 2100. The Department will evaluate adding new data sets and advanced predictive analytics using artificial intelligence and/or machine learning to this platform.

The Department evaluates related risks within its enterprise risk framework and emergency planning process. However, these processes do not explicitly address climate risks. The Department will seek to increase staffing and resources to further assess real property management, procurement, and financial systems for climate vulnerabilities.

Based on an interim assessment, the Department has identified the following five vulnerabilities:

1. People

Climate Threat and Expected Impact: Department personnel and their families will continue to experience physical and mental health risks due to climate impacts, such as increased air pollution and higher rates of communicable infectious diseases. At the same time, the rising frequency of climate emergencies will likely increase demand for interventions, meaning that personnel with related duties may be overburdened. Without action, these climate impacts could compromise the health and safety of Department personnel, negatively impacting national security and U.S. foreign policy priorities. Additional risks of not taking corrective action include lower morale, drawdowns, and disruptions to mission operations.

Adaptation Action, Timeline, and Indicators:

- In coordination with NSM-3 and Future of Work efforts, continue offering workplace flexibilities to support risk reduction for personnel through the mobility priority adaptation action.
- Continue to provide actionable information on health risks for personnel and their families from climate impacts. Current examples include the Air Quality Monitoring Program (DOSAir) and associated ZephAir app, which provides reliable and real-time air quality information, and the Climate Hazard Dashboard, which presents the number of days above an extreme Danger Threshold of 130 degrees Fahrenheit. The Department will incorporate this data in emergency planning and enterprise risk management in FY2022, as outlined in the emergency preparedness priority adaptation actions.

Resource Implications, Enterprise Risk Management:

- Resource implications include procuring equipment, such as room air cleaners to mitigate air pollution in residences; retrofitting residences and offices as needed, such as installing additional insulation to efficiently handle increased cooling loads; and training.
- Additional resource implications and how the Department incorporates mitigating vulnerabilities for its people are discussed in the mobility and emergency preparedness priority adaptation actions.

2. Continuity of Operations for Critical Services and Operations

Climate Threat and Expected Impact: The Department must be able to rapidly respond to and recover from climate change-related emergencies through proactive measures. The Department has an emergency preparedness methodology that includes post emergency planning, Department-level continuity planning, and communication infrastructure to enable continuity of operations. Without appropriately communicated and acted upon vulnerability assessments, the Department risks leaving its diplomatic missions ill-equipped to rapidly respond to and rebound from sudden or slow-onset stressors, limiting the time and resources we can expend to support host country responses and vital U.S. citizen services.

Adaptation Action, Timeline, and Indicators:

- Actions, timelines, and indicators are provided for overseas operations in the emergency preparedness priority adaptation actions.
- Domestically, the Department ensures that continuity of operations plans incorporate severe weather and climate emergencies. The Department will continue to assess changes to potential climate crises for incorporation into its emergency planning.

Resource Implications, Enterprise Risk Management:

- Additional resource implications and how the Department incorporates mitigating vulnerabilities for its continuity of operations are discussed in the mobility and emergency preparedness priority adaptation actions.

3. Facilities (Non-residential)

Climate Threat and Expected Impact: Climate threats to our non-residential facilities include severe weather, flooding, wildfires, and extreme heat. Depending on severity, threats range from minor operational issues to wholesale destruction and closure of our facilities.

Critical domestic facilities supporting our secure data networks, interpretation and translation services for the entire U.S. Government, worldwide financial centers and payroll, diplomatic security law enforcement activities, logistics and supply chain functions, arms control, intelligence and research, and passport production are subject to local operational disruptions in the event of weather disasters, grid interruptions, or internal equipment failures.

Adaptation Action, Timeline, and Indicators:

- Timeline, actions, and indicators are outlined in the emergency preparedness and mobility adaptation priority actions.

Resource Implications, Enterprise Risk Management:

- Additional resource implications and how the Department incorporates mitigating vulnerabilities for its continuity of operations are discussed in the mobility, facilities, and emergency preparedness priority adaptation actions.

4. Diplomatic Residences (Overseas)

Climate Threat and Expected Impact: U.S. diplomats serving overseas typically reside in housing leased or owned by the U.S. government. More than half of the total real estate assets overseas are diplomatic residences. In some host nations, lack of building codes or enforcement makes finding housing that meets security and resilience criteria difficult. To a large extent, diplomatic residences are leased, which may offer some flexibility in adapting to some identified vulnerabilities (e.g., retreating from flood zones), but may pose challenges in adapting to others (e.g., implementing retrofits).

Adaptation Action, Timeline, and Indicators:

- The Department already has guidance and auditing processes to assess and improve residential properties. These processes and policies will be updated over the next five years to incorporate screening tool datasets and host nation engagement.
- The Department will continue to pilot lower-cost sensors to identify at-risk residences and equipment, both in real-time and for long-term assessment.

Resource Implications, Enterprise Risk Management:

- To the extent possible, the Department will mitigate local limitations to our overseas diplomatic residences in our risk management activities, including via leasing guidance, residential safety inspections, and commissioning residences.

5. Utilities

Climate Threat and Expected Impact: The Department is often reliant on local infrastructure to support operations. Utility infrastructure may be extremely vulnerable to short- and long-term climate impacts. Increasing temperatures and storms may change the operational needs for utilities over time, leading to potential shortages. The Department installs back-up diesel generators and back-up water supplies for its overseas facilities and some domestic facilities. However, supplies are limited.

Adaptation Action, Timeline, and Indicators:

- In FY2022, the Department will evaluate creating a central repository of host country infrastructure to build its central database of facility-level, real-time power quality and energy consumption data.
- In FY2022, the Department will evaluate the annual sustainability survey and other regular data exercises to update the repository with current information.
- The Department will continue to work with other agencies and the private sector to identify and install back-up sources, such as renewable energy, to support additional resilience in case of utility disruptions.
- A major roadblock is that the local utilities on which diplomatic missions rely are outside of the Department's control. This clearly impacts the Department's ability to influence change with our utility providers.
- Additional relevant actions are outlined in the facilities and host country engagement priority adaptation actions.

Resource Implications, Enterprise Risk Management:

- The Department requires sufficient staff and training to maintain newer technology.
- Local utility limitations will be considered as a part of risk management activities, including via the residential and post site selection process, procurements, and development of on-site backup infrastructure.
- Additional relevant resource and enterprise risk management implications are outlined in the facilities and host country engagement priority adaptation actions.

ENHANCING CLIMATE LITERACY AND STAFF IN THE MANAGEMENT WORKFORCE

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The Department views climate literacy as an important tool to promote a culture of preparedness and environmental stewardship. The Foreign Service Institute (FSI) has committed to incorporating climate and sustainability modules into relevant training. FSI has assessed existing training offerings and is working with the Special Presidential Envoy for Climate, the Bureau of Oceans and International Environmental and Scientific Affairs, the Climate and Sustainability Working Group, and the interagency to identify additional training needs and opportunities. After the additional training needs assessment is complete, FSI's Management Tradecraft Training division plans to incorporate climate literacy modules into training for personnel involved in the day-to-day overseas operations including facilities management, human resources, financial management, and general services. Outside of formal training offered by FSI, the Department will leverage the Greening Diplomacy Initiative (GDI)'s communications efforts to raise climate literacy and engagement in the workforce.

The Bureau of Global Talent Management (GTM) is also launching an effort to determine appropriate domestic and overseas staffing needs for climate management and sustainability to inform a longer-term plan, to include the human resources needs identified in this plan. The goal is to understand staffing and training gaps and prioritize areas of concern and greatest need. After the assessment is complete, GTM will develop a recruitment plan.

ADAPTING TO CHANGE

U.S. Embassy Windhoek had frequent issues with emergency radio broadcasts because of power fluctuations to radio repeaters. To solve the problem and ensure the radio would be available in a life-or-death situation, the Embassy turned towards green solutions. They installed a wind turbine and solar panels on the radio repeaters, ensuring constant power to the site. They also incorporated a Global System for Mobile (GSM) communications control solution for repeater tower operations, meaning personnel could perform basic maintenance tasks remotely. Not only was the green solution the cheapest solution with no associated monthly costs, but removing the need for weekly maintenance trips saves Embassy Windhoek and the Department time and money while reducing their overall carbon footprints.

EMBASSY WINDHOEK'S SOLAR- AND WIND-POWERED RADIO REPEATER TOWER

ACTIONS TO ENHANCE CLIMATE RESILIENCE

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I. CLIMATE-READY SITES AND FACILITIES (OVERSEAS)

The Climate Hazards Dashboard review of existing facilities for climate hazards will create a priority list for further detailed review and possible intervention. After the assessment phase is complete, the Department's intra-agency Climate and Sustainability Working Group will work to incorporate climate adaptation requirements into management functions and decision points. The responsible offices and implementation timeline are listed in the relevant priority actions.

The Department will work with host countries through our existing eco-diplomacy efforts to ensure no maladaptation or inequitable distribution of environmental risks and benefits occurs. The requirement to confirm the equitable distribution of environmental risks and benefits will be a consideration in the U.S. government's project planning process and included as a requirement for our designers of record.

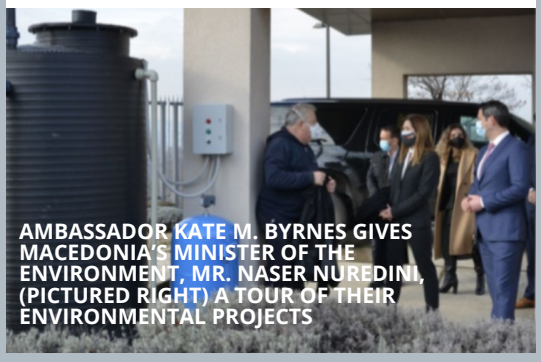
II. CLIMATE-READY SUPPLY OF PRODUCTS AND SERVICES

As noted in the priority adaptation action on supply chain and procurement, the Department is currently in the assessment phase. Though further study is needed, the Department preliminarily identified five supplies and services as the most critical and at-risk: 1) IT infrastructure and data centers; 2) utilities; 3) transportation; 4) communications infrastructure, including telecoms; and 5) American citizen, passport, and visa services. These at-risk supplies and services are addressed in our priority adaptation actions for facilities, supply chain, and mobility.

After the Department completes a more rigorous assessment, the Department will develop processes that prioritize climate readiness and prompt innovation in materials, products, and contracting to meet mission needs and mitigate risks. This work will include working with industry advisory groups and across the interagency to share best practices and leverage government-wide efforts. The responsible offices and implementation timeline are listed in the relevant priority action.

ADAPTING TO CHANGE

U.S. Embassy Skopje installed a rainwater catchment system to reduce the risk of flooding onsite. The storage tank also helps reduce Post's reliance on the municipal water supply, and provides water for irrigating the native pollinator friendly plants in the National Wildlife Certified Backyard Habitat landscape. The U.S. Ambassador showed this project to North Macedonia's Minister of the Environment as an example of how a resilience project can meet multiple goals.



AMBASSADOR KATE M. BYRNES GIVES MACEDONIA'S MINISTER OF THE ENVIRONMENT, MR. NASER NUREDINI, (PICTURED RIGHT) A TOUR OF THEIR ENVIRONMENTAL PROJECTS

U.S. DEPARTMENT *of* STATE