

U.S. Department of State
2014 Climate Change Adaptation Plan
(Appendix of 2014 Agency Sustainability Plan)

UNCLASSIFIED

**U.S. Department of State
FY14 Climate Change Adaptation Plan**

Contents

Introduction: Framework for Climate Change Adaptation2

Agency Vulnerability: Analysis of Climate Change Risks and Opportunities3

Process of Agency Adaptation Planning and Evaluation6

Department Inventory of Adaptation Activities8

 Operations8

 Policy.....11

 Strategic Planning Activities15

 Programs.....17

Next Steps: Actions to Better Understand and Address Climate Change Risks and Opportunities20

Summary & Preliminary Strategic Goals through FY1721

Introduction: Framework for Climate Change Adaptation

Vision & Mission

As the lead institution for conducting U.S. foreign policy, the Department of State advances freedom for the benefit of the American people and the international community by helping to build and sustain a more democratic, secure, and prosperous world composed of well-governed states that respond to the needs of their people, reduce widespread poverty, and act responsibly within the international system.

The Department recognizes an overwhelming scientific consensus tells us that our climate is changing and human activity is the primary cause. Without decisive action now around the world, the impacts from climate change will worsen in coming decades. Both the 2010 Quadrennial Diplomacy and Development Review (QDDR) and 2010 U.S. National Security Strategy (NSS) recognizes climate change is a national and global security threat multiplier. The NSS acknowledged that "danger from climate change is real, urgent, and severe. The change wrought by a warming planet will lead to ... new suffering from drought and famine; catastrophic natural disasters; and the degradation of land across the globe. The United States will therefore confront climate change based upon clear guidance from the science, and in cooperation with all nations – for there is no effective solution to climate change that does not depend upon all nations taking responsibility for their own actions and for the planet we will leave behind." The 2010 Quadrennial Diplomacy and Development Review (QDDR) highlighted the importance of rapid and effective action to address the global challenge of climate change.¹

The Department seeks a leadership role in convening partners to build global capacity towards the understanding of and resilience to climate change risks, particularly in the most vulnerable countries. As part of this role, the Department will help disseminate adaptation solutions worldwide by sharing best practices, including from its global facilities and missions. The Department understands doing so will help maintain hard-won development gains globally, enhance the resilience of weather-sensitive economic sectors to changes in climate, reduce risks of dislocation with implications for U.S. national security, and reduce human impacts on the environment.

Principles

The Department will advance policies and programs to prepare for and adapt to the impacts of climate that:

- Are designed, implemented, monitored, and evaluated with meaningful involvement from a diverse representation of society, including women and vulnerable populations;
- Incorporate the best available science and technology;

¹ *Leading through Civilian Power: The First Quadrennial Diplomacy and Development Review, 2010.*
<http://www.state.gov/documents/organization/153142.pdf>

- Prioritize the most vulnerable communities and populations; and
- Integrate adaptation into broader development plans and programs in a way that maximizes benefits, reduces risks, and increases ecosystem resilience.

Long Term Goals

The Department seeks, over the long-term, to:

- Work with other agencies, and develop and implement effective international adaptation policies and programs and promote the integration of adaptation considerations into diplomatic and development initiatives in sectors that will be impacted by climate change, such as agriculture, energy, water, and disaster risk management;
- Ensure efforts in multilateral bodies, such as the U.N. Framework Convention on Climate Change (UNFCCC), the Intergovernmental Panel on Climate Change (IPCC), U.N technical agencies, and multilateral funding agencies, are pursuing ambitious and effective adaptation strategies;
- Integrate adaptation considerations into its domestic and overseas operations through reporting, planning, and training.

Responsible Offices

Management Policy, Rightsizing and Innovation (M/PRI), Oceans and International Environmental and Scientific Affairs/ Global Change (OES/EGC), and Special Envoy of Climate Change (SECC) are responsible for leading the development, implementation, and evaluation of the Department's adaptation plan.

Agency Vulnerability: Analysis of Climate Change Risks and Opportunities

People are critical to the success of diplomacy and development. Together with USAID, the Department is implementing a long-range strategy to build a workforce with the right skills and support, who are in the right place at the right time. We rely on the creativity, knowledge, skills, and integrity of our dedicated employees to carry out our mission. Their attitudes and actions are key to mobilizing the shared effort needed to solve problems on a global scale and build a more peaceful and prosperous future for our children, and for children around the world.

As climate change continues to impact the Department's mission and strategic goals, the Department will need to assess whether employees have the appropriate skills and support to respond to such challenges. The Department may need to strengthen communication and coordination with – and draw upon the expertise of – technical agencies like United States Agency for International Development (USAID), Environmental Protection Agency (EPA), Department of Energy (DOE), and National Oceanic Atmospheric Administration (NOAA).

Potential Climate Risk and Department Vulnerabilities

Department Mission:

- Shape a freer, more secure, and more prosperous world; promote peace and stability in areas of vital interest to America; and help developing nations establish stable economic environments.
- Maintain diplomatic relations with countries and international organizations.

Potential Risks	Potential climate impacts	Potential impact on the Department’s ability to achieve its mission
<ul style="list-style-type: none"> • Warmer and/or fewer cold days and nights, and warmer and/or more frequent hot days over most land areas. (IPCC AR5 WG1 SPM). • Increase frequency and/or duration of heat waves over most land areas. (IPCC AR5 WG1 SPM) • Likely more areas with an increase than a decrease in the frequency, intensity and/or amount of heavy precipitation events. (IPCC AR5 WG1 SPM) • Increased incidence and/or magnitude of extreme high sea level. 	<ul style="list-style-type: none"> • Through mid-century, most impacts of climate change on human health are projected to be exacerbations of existing climate-sensitive diseases and conditions, and the burden will be greatest in developing countries where those climate-sensitive diseases are the most prevalent now. (IPCC AR5 WGII, Chapter 11) • Even a modest temperature increase is projected to have detrimental effects on yields of major crops in tropical and temperate regions. (IPCC AR5 WGII, Chapter 7) • Health infrastructure may 	<p>The U.S. Department of State has over 275 diplomatic locations around the world, including embassies, consulates, and missions to international organizations.</p> <ul style="list-style-type: none"> • As it gets hotter in most regions, demand will go down for heating, but increase for cooling, which will have implications on energy use and cost as well as building infrastructure. This may not directly impact the Department’s ability to maintain diplomatic relations, but it could make it more challenging to operate U.S. diplomatic missions. (Ongoing vulnerability). • Increase in heavy precipitation events could damage the electric grid, transportation and energy water infrastructure, upon which the Department depends, making it difficult to maintain operations that underpin our ability to maintain diplomatic relations. (Medium to long term vulnerability). • The combination of sea level rise and storm surges puts Department assets in heavily developed coastal areas at risk of damage and/or increase the difficulty to offer logistical

<p>(IPCC AR5 WG1 SPM)</p> <ul style="list-style-type: none"> Increased temperatures will lead to higher peak concentrations of air pollution, including ground level ozone and particulate matter, in already polluted urban regions. (IPCC AR5 WG1 SPM) 	<p>be negatively affected in some regions by extreme weather events. (IPCC AR5 WGII, Chapter 10)</p> <ul style="list-style-type: none"> Climate trends are affecting the abundance and distribution of harvested aquatic species, both freshwater and marine in different parts of the world. (IPCC AR5 WGII, Chapter 7) Changes in temperature and precipitation are projected to contribute to increased global food prices by 2050. (IPCC AR5 WGII, Chapter 7) Migration patterns will be driven by multiple factors, of which climate change is only one. (IPCC AR5 WGII, Chapter 9) 	<p>support or maintain operations. (Long-term vulnerability).</p> <ul style="list-style-type: none"> Department staff serving in areas with poor air quality will experience a further increase in the already elevated risk of respiratory and cardiovascular disease. Staffing of overseas positions has already been adversely impacted; this will worsen, and could impact operations. (Ongoing vulnerability). Climate change impacts may threaten international peace, civil stability, and economic growth through aggravating existing problems related to poverty and environmental degradation. As security deteriorates in a given country, the Department's operations are put at risk and the cost of doing business rises significantly. Environmental and poverty-related issues and regional instability could stress our relationships with some foreign governments and impact trade. As underscored by the 2008 National Intelligence Assessment, "global climate change will have wide-ranging implications for U.S. national security interests over the next 20 years because it will aggravate existing problems—such as poverty, social tensions, environmental degradation, ineffectual leadership, and weak political institutions—that threaten state stability." (ongoing vulnerability) The specific impacts of climate change on conflict, migration, terrorism, and complex disasters are still uncertain, as are the specific impacts of climate change on the ability of the Department to promote peace and stability in regions of vital interest to the United States. (ongoing vulnerability)
---	---	---

Process of Agency Adaptation Planning and Evaluation

Research and Knowledge Base

The Department is actively addressing ongoing vulnerabilities and is using a wide range of resources in the iterative process of identifying and understanding climate change risk and vulnerabilities. These include, but are not limited to:

- **U.S. Global Change Research Program.** USGRP's 2014 National Climate Assessment report documents the impacts of global changes on livelihoods, infrastructure, ecosystems, food production, energy supply, national security, and the cultural heritage of populations and communities.
- **The IPCC's Fifth Assessment Report.** Published by thousands of authors, editors, and reviewers from dozens of countries in 2014, the report is the fifth in a series intended to assess scientific, technical, and socio-economic information related to climate change, its current and potential effects, and options for adaptation and mitigation.
- **The IPCC's Special Report on Extreme Events.** Published in 2011, the Special Report assesses the effect that climate change has on the threat of natural disasters and how countries can better manage an expected change in the frequency of occurrence and intensity of severe weather patterns.
- The UNFCCC's **Cancun Adaptation Framework** provides broad guidance to encourage actions, both inside and outside the Convention, to meet the needs that all parties have indicated as urgent. Those needs include preparing impact and vulnerability assessments – to better understand which populations and sectors are vulnerable and why – and strengthening climate-related disaster risk reduction strategies.
- The UNFCCC's **Nairobi Work Program**, helps improve understanding and assessments of impacts, vulnerability, and adaptation to climate change through expert meetings, workshops, publications, and an online database.
- **The Adaptation Partnership.** Together with Spain and Costa Rica, the United States co-chaired the Global Adaptation Partnership between 2010-2012 to catalyze action by improving coordination and communication among an increasing number of stakeholders engaged in adaptation. As part of the Partnership, in 2012 the Department commissioned a regional and country-by-country inventory of planned and existing adaptation actions in

Latin America and the Caribbean, Africa, Asia, and the Pacific. This report remains the most comprehensive inventory of planned and existing adaptation actions to date.

- **Office of the Director of National Intelligence** evaluates and disseminates pertinent security reviews including its recent “Intelligence Community Assessment on Global Water Security”, which highlights global water challenges that have implications for Department operations and programs.
- The **Greening Activities Inventory** is an annual survey conducted by the Department’s Greening Council that provides sustainability and adaptation-related updates from U.S. missions abroad.
- The **Greening Council Executive Secretariat** supports the Department’s senior-level Greening Council and manages the Department’s sustainability-related strategy and program development activities domestically and overseas. The GCES promotes Eco-Diplomacy, the practice of conducting international relations by facilitating and advancing a shared commitment to conserving natural resources through sustainable operations and responsible environmental stewardship.
- The Department’s **Bureau of Overseas Buildings Operations (OBO)** receives on-going data from post managers on issues related to sustainability at the post, compound, and building levels. This data is compiled into an annual trend report related to the Department’s overseas missions.
- The Department’s **Bureau of Administration** receives regular updates and communications from domestic facility managers.
- The Department’s **Medical Bureau** provides resources to assess and recommend protocol and strategies for managing health and human resources-related risks.
- The Department’s **International Information Programs Bureau** works directly with US missions on targeted campaigns for public outreach efforts focused on climate change and building climate resiliency globally.

The Department’s top operational priorities in planning for and evaluating climate change risk include:

- Setting up infrastructure to solicit and disseminate planning requirements between headquarters and the field;
- Understanding the immediate to near-term impacts of climate change on operations;
- Determining their implications for Department resources and budgetary requirements.

Monitoring and Evaluation

The Department's monitoring and evaluation activities occur on an ongoing basis and when relevant action warrants regular review and assessment. Annual reporting on the Department's progress in its domestic portfolio is included in Department's Annual Sustainability Plan submissions to OMB.

Department Inventory of Adaptation Activities

Over the last two years the Department has improved its understanding of climate risks and vulnerabilities and has used policies and programs to advance its climate resilience. The Department has enhanced efforts to create a more comprehensive portfolio of strategic climate adaptation related activities. In 2014 the Department conducted an internal survey for all functional, policy, program, and regional bureaus in an effort to organize and highlight climate resilience activities. This evolving inventory will inform our ability to track progress as the Department's adaptation planning and action evolves and grows.

Operations

Procurement

The Department's Bureau of Administration (A Bureau) uses Integrated Logistics Management System (ILMS) procurement process to reduce the Department's overall footprint. The Department is interested in using this information to start to better understand risks related to the Department's supply chain. Demand planning capabilities have been deployed to ensure Posts only order supplies that are truly needed, leading to reductions in warehouse footprint and transportation. Through enhanced demand planning, the Department can also lessen its utilization of air freight, driving down a significant cost and source of environmental impacts. The ILMS Transportation Management System facilitates the consolidation of freight across multiple customers, reducing trucks and ocean containers. The ILMS analytics team is focused on harnessing the vast data in ILMS to continue to find innovative ways to drive down inventories, lower the reliance on air freight, shrink the Department's warehouse footprint, and in the future determine vulnerabilities in the supply chain.

Domestic

The A Bureau manages the Department's domestic owned and leased properties. In its climate change adaptation plan, the Bureau's approach is two-fold: minimize the impact of our facilities and operations on the environment, and identify vulnerabilities to our facilities and operations from climate variability (e.g., severe weather).

The Department is assessing the vulnerability of the Department's domestic facilities and operations to climate variability. Our focus is on assessing the reliability of its domestic critical infrastructure supporting world-wide operations. In addition, the Department is incorporating a

program element related to episodic severe weather in its next periodic update of its Critical Infrastructure Security and Resiliency plan. This will help us to identify and reduce vulnerabilities using risk-based decision logic. Potential vulnerabilities for facilities are identified and tracked through facilities maintenance management programs, where resource decisions on capital investment for mitigation are made.

All domestic leased or government-owned space over 5,000 square feet is designed and constructed based on sustainable design principles (Leadership in Energy and Environmental Design (LEED) Silver certified or better). Projects in government-owned properties that are less than 5,000 square feet are designed and constructed following sustainable design principles, but are not LEED certified.

Where possible, the Department seeks to implement renewable energy solutions for its properties to promote energy independence and heat and cool buildings off- peak hours in an effort to be good energy stewards during times where grid stress is anticipated. The Department currently has one LEED Platinum building in Charleston, South Carolina, a “net-zero” building that produces more energy from solar and wind sources than it uses. The Department continues to explore onsite and offsite renewable energy generation for the Department’s domestic facilities.

Overseas

The Department’s Bureau of Overseas Buildings Operations (OBO) has incorporated sustainable design criteria into new diplomatic facilities overseas for over a decade and continues to update energy and water performance targets. OBO has incorporated environmental criteria into site selection and evaluation criteria including: height above sea level, distance to mass-transit, and available infrastructure such as electrical power and municipal water and sewer services.

OBO has made strides to better communicate with field personnel on issues and best practices for sustainability related to existing facilities operations, including releasing the second addition of the *Guide to Green Embassies: Eco-Diplomacy in Operation* (the *Guide*), which provides comprehensive and useful information for mission staff – at every level – to fully integrate sustainability and environmental stewardship principles into daily operations and planning. In addition to the *Guide*, the *Post Green Team Toolkit* was provided by OBO to assist the over 150 post Green Teams established and operating around the world. These teams consist of champions who communicate, foster, facilitate, and lead change that support adaptation measures. For example, the *Guide* provides direction for building and maintaining on-site wetlands and rain water catchments for irrigation purposes, and to lessen the Department’s water usage footprint in vulnerable regions.

Since 2010, the Department has performed assessments of climate change risks and impacts on operations through an annual Greening Activities Inventory. The results of these annual sustainability surveys inform and shape updates to the Department’s policies and tools, which includes guidance on improving resilience of facilities and operations.

Agency Lead: OBO, M/PRI, A, IRM

Risk or Opportunity: Opportunity to reduce risk through better infrastructure

Scale: Global

Status: On-going

Targets, metrics, strategy for success:

- Greening Activities Inventory annual report;
- Quarterly reports to the Department's senior-level Greening Council on sustainability-related activities and programs;
- Quarterly conference calls with regional Post Green Teams;
- Percentage of building area meeting Guiding Principles of Sustainability (only applicable to office building area over 464sm);
- Number of staff in sustainable facilities as defined by Guiding Principles (only applicable to office building area over 464sm);
- Total potable water consumption reduced in office buildings over 464sm (compared to industry standard);
- Total potable water consumption for irrigation reduced on compounds hosting office buildings over 464sm (compared to industry standard).

Natural Hazard Program

In 2005, OBO created the Natural Hazards Program to provide engineering resources to identify and reduce risk to Department personnel and property from destructive natural events such as earthquakes, floods, landslides, and tropical cyclones. The program advises and educates staff responsible for safety and acquisition decisions and also assists in needed facility improvements to avert or reduce future damage from natural hazards, including those related to climate variability and change. The Department will continue to explore the risk posed by extreme weather events to its operations and, where appropriate, further integrate climate change considerations into the Natural Hazards Program.

Since inception, the program has integrated counter measures to natural hazards into Department building codes, training, and communications for its facilities managers and engineers, identifying and implementing reasonable measures to reduce or eliminate threats to life safety and damage to U.S. diplomatic facilities.

All US missions are encouraged to report non-seismic natural-hazard related problems (chronic and historic flooding, windows, doors and exterior structures vulnerable to high winds or flying debris, unstable or eroding slopes, etc.) which might constitute a threat to life safety and which

might qualify for assessment and risk reduction under the program. The results of these studies are used to match budgeted mitigation funds with posts which might benefit most from such measures being implemented.

Agency Lead: OBO Civil/Structural Engineering Division of the Office of Design and Engineering (OBO/PDCS/DE/CSE)

Risk or Opportunity: Opportunity to reduce risk through better informed engineers and facilities managers

Scale: Global

Time frame: Present – Indefinite

Implementation methods:

- Codes and Standards for Construction
- Training Workshops for Facility Managers
- Management Conferences
- Internal Communications

Performance metrics:

- Number of risks identified and evaluated for mitigation (annual total)
- Number of risks mitigated (from baseline)
- Outreach and Training efforts (annual total)
- Facilities meeting current standards and operational resistance to extreme weather (percentage of total occupied facilities by building type)

Policy

The Department has taken a number of steps to advance policies that encourage embassies and missions to support adaptation action. Some of these steps are new, launched over the last year, and some are ongoing. The following section provides an overview of these efforts.

The Department and USAID issued a Joint Strategic Plan in spring 2014 that sets forth five priorities for both organizations in the coming years. One of these five strategic goals is “Promoting the Transition to a Low-Emission, Climate-Resilient World while Expanding Global Access to Sustainable Energy.” In addition, the Secretary of State issued policy guidance in March 2014 to the Department and posts on climate change. The guidance sets forth U.S. policy and priorities to continue enhancing U.S. leadership on global climate change and underscores the critical and far-reaching impact of climate change on our broader foreign policy objectives and operations. It highlights the range of actions the United States is taking to lead on climate change internationally and domestically through the President’s CAP and the Global Climate

Change Initiative (GCCCI), including the Department's efforts to help countries reduce the risk of climate change while also achieving more sustainable development gains.

The Department is a member of the President's Council on Climate Preparedness and Resilience, established in 2013. In 2014, it began working with the National Security Council and other federal agencies in international programs that prioritize adaptation in humanitarian, development and export credit programs and facilitate greater interagency cooperation on adaptation, including through potential joint trainings and other capacity building exercises.

In 2014, the Department also joined the Friends of the Nansen Initiative. Switzerland and Norway established the Nansen Initiative to examine protection needs associated with cross-border population movements linked to natural disasters, including climate change-related disasters. As part of the Friends of the Nansen Initiative, the Department has the opportunity to engage with international actors from a broad range of disciplines on population movements linked to climate change. The Bureau of Population, Refugees, and Migration, the Department's Special Envoy for Climate Change, and the Office of Global Change in the Bureau of Oceans, Environment and Science coordinate the Department's engagement with the Nansen Initiative.

In addition, the Department played a critical role in 2013 and 2014 in advancing scientific understanding on climate change impacts and adaptation actions by coordinating the U.S. government's review of the IPCC's fifth assessment report and the development of the summary for policymakers (SPM) for Working Group II. Among its key points, the SPM highlights that vulnerability is a result of a combination of climate and non-climate-related risks, such as land use change, poverty and inequality, that implementation of adaptation action as well as evaluation of whether actions are effective are still limited, and that countries are still tending to compartmentalize adaptation, rather than integrating it into development planning and action.

With ongoing leadership from the Special Envoy for Climate Change and the Department's Office of Global Change in the Bureau of Oceans, Environment and Science, the Department is the lead federal agency engaged in partnering with countries to achieve substantive and effective outcomes at the negotiations of the UNFCCC. It is one of three agencies implementing the GCCCI, which helps promote stability by supporting developing countries in their efforts to transition to sustainable, clean energy economies; conserve forests and manage natural resources; and adapt to climate variability and change. A substantial portion of the activities under this initiative support enhanced resilience in countries that are particularly vulnerable to the impacts of climate change, with associated implications for stability.

The Department coordinates with other federal agencies, such as USAID, NOAA, EPA, DOI and USDA, and partners with other countries to implement the Cancun Adaptation Framework. The Cancun Adaptation Framework provides broad guidance to encourage actions, both inside and outside the Convention, to meet urgent adaptation needs, including the preparing of impact and vulnerability assessments and the strengthening of climate-related disaster risk reduction strategies. The Framework includes an Adaptation Committee to promote the implementation of enhanced action on adaptation in a coherent manner under the Convention, as well as a Loss and Damage Executive Committee to help countries address the risks associated with loss and damage. The Framework also includes a process for Least Developed Countries and other developing countries to develop and implement medium- and long-term national adaptation

planning. The Department's lead adaptation officer was Vice Chair of the Adaptation Committee in 2013 and is Co-Chair of the Committee in 2014. She is also a member of the interim Loss and Damage Executive Committee under the Cancun Adaptation Framework.

Together with USAID and NOAA, the State Department is contributing to international efforts, including with respect to the National Adaptation Plan process, to address near-term to long-term adaptation needs. This includes near-term needs such as helping farmers understand when it will rain and what to plant as seasonal rainfall patterns shift. On the medium- to long-term time scale, the Department and its partners are helping national governments establish and enforce smarter policies to reduce climate change risks such as policies that encourage communities to protect their coasts from storms and sea level rise through the conservation of mangroves, wetlands and reefs, or that encourage building back better and smarter after a disaster.

In collaboration with other agencies, like USAID, HHS, NOAA and EPA, the Department will also continue to contribute to the identification and implementation of activities under the UN Framework Convention on Climate Change's Nairobi Work Program (NWP), which seeks to improve understanding and assessment of climate change impacts and vulnerability and strengthen the capacity of countries to make informed decisions on practical adaptation actions and measures based on sound scientific, technical, and socioeconomic information. The NWP has attracted more than 200 partner organizations that have made over 140 action pledges to advance climate adaptation by:

- assessing risk and vulnerability;
- raising awareness of climate impacts and adaptation solutions;
- building capacity;
- delivering climate information and services to decision makers;
- facilitating the sharing of knowledge and good practices; and
- providing financial and technical support for adaptation planning and activities.

The Department is an active member of the Global Environment Facility's Least Developed Countries Fund (LDCF) and Special Climate Change Fund (SCCF) Council, the main vehicles for vulnerable countries to access multilateral adaptation funding under the Convention. The United States is the second largest donor to the LDCF and the third largest donor to the SCCF. As a member of the Council, The Department helps ensure the effective implementation of the funds' policies.

The Department, together with USAID, also provides technical guidance to the Department of Treasury, which represents the United States on the Green Climate Fund Board. The purpose of the Green Climate Fund is to make a significant and ambitious contribution to the global efforts towards attaining the goals set by the international community to combat climate change, including helping vulnerable countries adapt to the impacts of climate change.

The Department is also engaged in advancing climate change policy through other fora outside the UNFCCC such as the Global Climate Observing System (GCOS). Department funding to GCOS assists in supporting:

- the creation of an international framework for observing the climate system, particularly with respect to articulating and developing observing requirements;
- the Secretariat, which plays a critical role in coordinating global climate observations systems, with a focus on developing and at-risk nations;
- hand-on workshops that educate and train nations in establishing climate monitoring sites, as well as collecting, maintaining, and archiving data from these stations; and
- bilateral capacity-building agreements that have strengthened our ties with nations such as China, South Africa, Australia, and New Zealand.

In addition, the Department actively collaborates with NOAA in developing the Global Framework for Climate Services under the World Meteorological Organization, which aims to enable better management of the risks of climate variability and change, through the development and incorporation of science-based climate information and prediction into planning, policy and practice on the global, regional and national scales.

Finally, the Office of the Special Envoy for Climate Change and the Department's Office of Global Change in the Bureau of Oceans, Environment and Science have sought to build the capacity of missions and employees to better understand the science of climate change and its impacts, adaptation, and the UNFCCC negotiations. They develop and disseminate regular climate science updates, climate digests, cables, and talking points to meet general and country-specific needs, as well as convene interagency briefings and develop papers and guidance for other Department negotiators and officials. The Department also draws upon the technical expertise of other federal agencies, as well as other governments and institutions to support our adaptation policy and programs overseas.

United Nations Framework Convention on Climate Change, International Organizations, and Partnerships

The Department coordinates with other federal agencies and partner with other countries to implement the Cancun Adaptation Framework through effective negotiations of the UN Framework Convention on Climate Change.

Lead Agency:	OES/EGC and SECC
Risk or Opportunity:	Opportunity to enhance global action on adaptation
Scale:	Global
Timeframe:	Ongoing
Implementation methods:	

- Negotiations
- Submissions
- Expert meetings
- Workshops
- Reports
- Online products
- Calls for action

Performance metrics:

- Policy guidance implemented by embassies.
- Technical and policy guidance provided to relevant international organizations and other partners listed above.
- Cancun Adaptation Framework operationalized.
- Number of partner organizations.
- Number of action pledges.

Collaborating agencies: USAID, NOAA, EPA, DOI, USDA

Strategic Planning Activities

The Department is incorporating climate adaptation and resilience into its broader strategic planning, including consideration for inclusion in the next iteration of the QDDR. In addition, the Department's functional and regional bureaus focus on strategic planning activities that often include climate-related considerations. Comprehensive plans, such as the Joint Regional Strategic plans and Function Bureau Strategic plans, are developed for three year periods. For example, the Department and USAID Joint Strategic Plan highlights "Promoting the transition to a low emission, climate-resilient world while expanding global access to sustainable energy" as one of the five strategic goals for FY14-FY17.² Highlighted below are samples of The Department's climate adaptation planning strategies through 2017.³

Africa

Africa is vulnerable to natural resource degradation and the effects of climate change, which can negatively impact food and nutrition security, access to markets, and the continent's long-term agricultural and economic potential. The Department will lead U.S. Government efforts to ensure that African countries can adapt to climate change and conserve biodiversity while continuing to grow their economies and optimize the use of natural resources and human capital in a socially, economically, and environmentally sustainable manner. Long-term impacts include significant

² US Department of State & USAID, Joint Strategic Plan FY 2014-2017

³ Note: this is a sample, not a comprehensive inventory of initiatives and partnerships

temperature increases and changes in hydrological cycles, resulting in negative effects in terms of crop productivity, pest infestation, disease, and water- or temperature-related natural disasters.

Millions of people in Africa, especially smallholder farmers and pastoralists, are vulnerable to the devastating effects of recurrent crises such as drought and floods. In addition, climate change is already increasing the prevalence of debilitating diseases such as malaria, which is becoming more common in higher altitudes due to warmer temperatures. The Department, in conjunction with USAID, commits to work to improve the management of natural resources and enable countries to accelerate their transition to climate-resilient, lower-emission sustainable economic development.

The Department and USAID will promote the use of evidence-based analyses to identify the most critical climate stresses; carry out research to find ways to address them, such as developing improved seeds and targeting pests and diseases linked to rising temperatures; and apply these techniques in our on-the-ground work. Our work will encourage sustainable and equitable management of land, water, fisheries, and other resources critical to maintaining and strengthening resilience. This approach will enable the Bureau of African Affairs to decrease the vulnerability of people, places, and livelihoods to climate change by 2017.⁴

East Asia and Pacific

Global climate change and the impact of natural disasters pose a threat to sustainable development. The East Asia-Pacific region can improve its ability to adapt through disaster risk reduction efforts and integrated natural resource management, including biodiversity conservation, which provide climate co-benefits. The Department and USAID laid out an objective in the FY 15- FY 17 strategic plan to assist countries in the East Asia Pacific region to increase climate resilience through these mechanisms.

Biodiversity conservation can contribute to reinforces climate change mitigation and resilience efforts by creating refuges for important species and ecological processes that help sustain broader landscape functioning and ecosystem services like clean water, pollinators, and carbon sequestration. Fostering regional cooperation through the LMI, CTI, and ASEAN facilitates knowledge sharing related to adaptation and energy efficiency, enables sustainable management of trans-boundary resources, and encourages proactive action to limit GHG emissions.

In addition, regional efforts bolster climate-resilient agriculture and infrastructure development through the LMI, establish climate-resilient fisheries and coastal communities enhance climate resilient urban planning, and build governments' capacity to access climate information as well as improve disaster preparedness and response efforts. Because biodiversity activities can provide climate co-benefits, capacity building with regional institutions and networks that engage in this work, including the ASEAN Wildlife Enforcement Network (ASEAN-WEN), the South Asia Wildlife Enforcement Network and the MRC, also contributes to climate change efforts.⁵

⁴ Bureau of African Affairs, FY 2015-2017 USAID Regional Strategic Plan

⁵ Bureau of East Asia and Pacific Affairs, FY 2015-2017 USAID Regional Strategic Plan

Programs

As one of lead three agencies implementing the U.S. Global Climate Change Initiative (GCCCI), the Department will help vulnerable countries and communities reduce climate risks and impacts, lower the long-term costs of responding to climate change, safeguard investments in the longer-term, and achieve sustainable, climate-resilient development. With leadership from the Department, overall U.S. international adaptation assistance has increased eight-fold since 2009. The U.S. government spent roughly \$1.8 billion on adaptation in FY10-FY13. Our bilateral programs prioritize vulnerable Least Developed Countries, Africa, Small Island Developing States, and glacier-dependent countries. These programs help vulnerable countries and communities understand what to expect from climate change and what can be done to adapt and build resilience in key sectors.

The Department supports many adaptation efforts through its diplomatic and programmatic engagement. The lead agency varies, depending on the program. Some programs are global in scale while others are regional. Below are a few illustrative examples:

Least Developed Countries Fund and Special Climate Change Fund: Through the fund, the Department has supported Least Developed Countries (LDCs) in implementing activities identified in the National Adaptation Programs of Action. These country-driven strategies identify urgent and immediate adaptation needs. The Department also supports developing countries through the Special Climate Change Fund, including small island developing states and glacier-dependent countries to strengthen the resilience of key national development sectors.

Assistance to the two funds has leveraged additional donor assistance. As the average funding available per country has grown, countries have been increasingly able to integrate adaptation into larger development programs that address multiple sectors and are therefore anticipated to result in more substantial and long-lasting resilience to climate risks.

More than 100 vulnerable countries have benefited from the LDCF and SCCF, which have supported the integration of climate change adaptation into 175 national development policies, plans and frameworks in 57 countries. These funds assist 47 countries in enhancing their national hydro-meteorological and climate information services for climate resilient development and disaster risk reduction. The LDCF and SCCF also strengthen the capacity of 280 national and subnational agencies and more than 400,000 individuals to take adaptive actions.

Pacific Small Island Developing States: The Department designed a program with USAID to advance adaptation in the Pacific Small Island Developing States.

The program:

- Enhances institutional and human capacity in the region to access adaptation funds and to understand, forecast, and use climate information to strengthen adaptive capacity in key development sectors.
- Supports food security in the context of climate change among farming communities in Fiji, Kiribati, Samoa, Solomon Island, Tonga, and Vanuatu.
- Improves the ability of communities in the outer islands of Kiribati to address the impact of climate change and variability on water resources.
- Promotes healthy ecosystems such as mangroves, coral reefs, and wetlands that can form natural barriers against extreme weather events in the Solomon Islands.

Maldives. The Department designed a program with USAID to boost climate resiliency and water security in the Maldives. The program enables analysis of projected climate change and vulnerability, improves decision making based on sound science, analysis and information, and provides select climate-resilient water, sanitation and solid waste infrastructure, supplies and training to communities.

Central America. The Department designed a program with USAID to support regional climate change programming in Central America. The adaptation component of the program seeks to (1) build partnerships, capacity, and governance structures at the regional level in support of national efforts in responding to the threats and potential impacts of climate change, (2) support the development of science analyses of climate change impacts in Central America and the Dominican Republic, and (3) develop and implement sustainable options for investments in climate change related information and tools.

Chile. Under the framework of the U.S.-Chile Environmental Cooperation Agreement, the Department supports the U.S. Department of the Interior and U.S. Geological Survey in work with the Government of Chile and Centro de Estudios Científicos to improve understanding of the role of glaciers in hydrological resources and to enhance Chile's glacier management strategy. Partners have brought together more than 50 glacier experts to discuss glacier monitoring strategies to assist in predicting long term water storage and availability.

Global Innovation Lab for Climate Finance: The Department founded the Global Innovation Lab for Climate Finance, which was launched in April 2014. The Lab will design, stress test and pilot the most new promising instruments and approaches targeted at catalyzing private investment in mitigation and adaptation in developing countries. Furthermore, the Lab will support the efforts of developed countries to meet their international climate finance commitment to mobilize \$100 billion per annum by 2020 from a range of public and private sources to support climate action in developing countries.

US Mission Examples

Several US overseas missions are actively engaged in activities to address climate vulnerabilities through bilateral agreements and local engagement efforts. US diplomatic posts are implementing solutions in an effort to reduce their environmental footprint, conserve resources, and enhance security in response to and in preparation for potential adverse climate conditions.

Over 150 US diplomatic posts have active green teams focused on overall sustainability activities. In accordance with E.O. 13653, the Department is considering opportunities for including climate impact mitigation elements, such as solar powered back-up energy supply, as part of preparedness and resilience efforts. A few specific examples are shared in the below section.

Embassies Djibouti & Addis Ababa

Grant funding from the Ambassador's Special Self-Help (SSH) program builds the resilience of local communities against increased drought conditions, largely through facilitating the construction of water reservoirs, and through assisting pastoral communities to diversify their sources of household income.

The Regional Environment Officer (REO) hub in Ethiopia reported plans for the coming year to include tracking and reporting on host government climate adaptation and mitigation policies, including the implementation of Ethiopia's Climate Resilient Green Economy strategy, as well as on regional government preparations for upcoming rounds of UNFCCC negotiations.

Embassy Canberra

Embassy Canberra has formed a Green Team that plans and implements ideas to reduce energy consumption and provide back-up energy supply. These actions include the installation of solar panels on government owned residences. Employees are actively encouraged to participate on the green team. Climate change has become a leading issue for the embassy's diplomatic outreach and they engage host government officials, think-tank, and NGO communities at every opportunity and at all levels.

In addition, several Department offices with missions not specifically focused on environmental activities build in climate considerations into their operations and program implementation. For example, the Department's Bureau of Education and Cultural Affairs (ECA) hosts International Visitor Exchange Program participants focused on climate change and resilient development. In addition, several ECA programs, like the Sports Diplomacy initiative, are revamping their request for proposal (RFP) process to include sustainability and climate resiliency educational components to their program schedules.

Finally, many bureaus are also modifying their travel budgets by increasing the use of DVCs and updating internal telecommuting policies to address transportation congestion and overall grid stress during extreme weather events. For example, the Department's Legal bureau encourages telework arrangements and alternative work schedules when possible for staff.

Lead Agency:	Varies
Risk or Opportunity:	Opportunity
Scale:	Global and regional (varies)

Timeframe:	Ongoing
Implementation methods:	Varies
Performance metrics:	Varies
Collaborating agencies:	Varies

Next Steps: Actions to Better Understand and Address Climate Change Risks and Opportunities

The Department will continue to engage in the activities described above in an effort to strengthen understanding and further operational, policy and programmatic action. Most notably, the Department will implement its strategic goal of “Promoting the Transition to a Low-Emission, Climate-Resilient World while Expanding Global Access to Sustainable Energy” in its Joint Strategic Plan with USAID. It will implement the climate change policy guidance which was issued by the Secretary of State in March 2014. The Department will also continue to partner with countries to advance substantive and effective outcomes at negotiations of the United Nations Convention on Climate Change, and to strengthen knowledge and understanding of and enhanced action to address adaptation through its engagement through a variety of global, multilateral and bilateral policy and programming.

Moreover, the Department will continue to improve its understanding of vulnerabilities to climate risks through collaboration with other federal agencies that have international operations. Specifically, the Department will be participating in the Department of Defense-led regional scenario working group in an effort to develop useful assessment tools for State’s operations. The Department will continue to work in coordination with the federal community to utilize best available science to improve data-driven resilience tools. One outcome will be interactive sea level rise maps for international operations.

The Department will continue inventorying climate resilience-related policies and programmatic strategies in preparation of the next iteration of the QDDR. The results will be utilized to inform central strategic planning initiatives, including the development of criteria for evaluating global operational decisions ranging from energy procurement to processes for evaluating relocation priorities of existing facilities.

The Department is invested in a shared commitment to conserving natural resources through sustainable operations and responsible environmental stewardship. In accordance with the President’s Climate Action Plan, the Department is developing the necessary tools to strengthen government and local community planning and response capacities internationally, as well as toolkits for climate resilience planning for our diplomats in the field.

For example, the Department is planning on incorporating sustainability modules with resilience/adaptation components into select entry-level Foreign Service officer (FSO)

orientation training courses. The Department aims to promote a culture of environmental stewardship by providing officers in the field the tools to implement projects and policies that incorporate resilience considerations.

Externally, the Department will support the development of a Capitals Forum program, which will serve as a venue for diplomatic communities to share best practices in climate resilience in the energy, water, and building management sectors with local and federal governments in capital cities around the globe. A pilot version of the program is currently being implemented in Washington, D.C. area, with over 77 foreign diplomatic missions entering into a sustainability pledge with the local DC government. Through the Forum, foreign missions work together to address environmental challenges in Washington D.C., including issues like storm water management.

Summary & Preliminary Strategic Goals through FY17

The Department's internal stakeholders will identify and address barriers to success for on-going and anticipated climate related challenges. Below is a preliminary sample of some of the Department wide climate resilience actions through FY 17.

Category	FY14	FY15	FY16 - FY 17
Training and Tools	<p>The Department currently offers guidance on improving resilience of facilities and operations for embassy operations through a sustainability tool kit and guide to green embassies.</p> <p>-The Department is working with field officers to develop eco-options to address a variety of potential climate risks.</p> <p>-The Department in coordination with EPA is developing air quality monitoring training for foreign service officers in the field.</p>	<p>-The Department is planning on incorporating adaptation components into new sustainability modules which are in development for select entry level FSO training courses.</p> <p>- Incorporation of Climate related security considerations in scenario planning activities for the field.</p>	<p>Expand upon relevant Foreign Service Institute training opportunities to include mid and senior level officers.</p>

Partnerships	<p>The Department currently participates in the Federal Climate Change Adaptation Community of practice, National Capital Planning Community, President's Council on Climate Preparedness and Resilience, and the NSS Climate Change Preparedness and Resilience Exercise series.</p> <p>-The Department is working with EPA to develop an Air Quality Monitoring program for US Missions overseas that leverage EPA air quality monitoring expertise.</p>	<p>-The Department will support the development of an Eco-Capitols Forum program which will serve as a venue for the diplomatic community to share best practices in energy, water, and management (low emission development) with local and federal governments in capital cities around the globe.</p>	<p>The Department will continue to participate in federal and regional workgroups and promote expansion of activities which aim to strengthen global resilience to climate change.</p>
Vulnerability Assessment	<p>The Department has performed preliminary assessments of risks and impacts of climate change on operations through an annual sustainability survey since 2010.</p>	<p>-The Department will be joining the DOD-led regional scenario work group in an effort to further develop vulnerability assessment tools.</p>	<p>The Department will continue to work in coordination with the federal community, to and utilize best available science to continue to improve data-driven resilience tools, including an interactive sea level rise maps for international operations.</p>
Strategic Planning and Outcomes	<p>-The Department operated in accordance with the QDDR strategic objectives as outlined in 2010, and continues to update objectives as outlined in the above report.</p>	<p>- In accordance with the CAP the Department released Climate Diplomacy Guidance in spring 2014 which outlined the strategic vision for the Department's climate activities and resilience goals.</p>	<p>-Develop Climate Adaptation criteria for relevant activities based on inventory findings and QDDR guidance.</p>