



UNITED STATES AGENCY FOR INTERNATIONAL DEVELOPMENT (USAID)
AGENCY SUSTAINABILITY PLAN (ASP)
IN SUPPORT OF
EXECUTIVE ORDER 13514
FEDERAL LEADERSHIP IN ENVIRONMENTAL ENERGY & ECONOMIC PERFORMANCE

JUNE 2, 2010

"To save nature all of us need to work together: development agencies, governments, private sector partners, and -- most importantly -- the local communities whose livelihoods are at stake. And not just on Earth Day, but every day".

Dr. Rajiv Shah, Administrator, U.S. Agency for International Development
Earth Day Statement, April 22, 2010

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Section 1: Agency Policy and Strategy

I. Agency Policy Statement

The U.S. Agency for International Development (USAID) is the U.S. Government's lead agency in providing assistance to the developing world. Consistent with the Foreign Assistance Act of 1961, as amended, other foreign assistance legislation and the National Security Strategy, USAID is committed to the ideals and practices of environmental responsibility through the implementation of measures designed to:

- integrate the principles of environmental sustainability into its administrative, operational and program policies and activities;
- minimize, to the extent practicable, any negative impact of USAID operations and programs on the environment, through a process of continual improvement and strategic investment;
- create opportunities for good environmental practice and awareness of environmental policies and issues amongst Agency personnel;
- foster the continued development of best practices and expertise in environmental disciplines in order to provide knowledge and capacity building related to environmental sustainability throughout USAID and its programs; and
- establish transparent decision-making processes that encourage the expression of alternative solutions and promote sustainability.

USAID will implement its sustainability program through a comprehensive plan with measurable goals and with monitoring and analysis of performance against the plan. USAID is dedicated to partnering with the federal and private community to address environmental issues domestically and internationally.

II. Sustainability and the Agency Mission

U.S. Agency for International Development (USAID) promotes peace and stability by fostering economic growth, protecting human health, providing emergency humanitarian assistance, and nurturing democracy in developing countries. With this mandate, the Agency seeks to improve and/or provide many basic human services and is engaging in infrastructure, health, environment, education, industry, housing, agricultural and other economic and social development projects. The U.S. Department of State and U.S. Agency for International Development Joint Strategic Plan FY2007-2012, identifies the Agency's objectives related to protecting the environment and advancing energy security for the U.S in Strategic Goal 4: Promoting Economic Growth and Prosperity. Environment is also integrated as a crosscutting objective for our four other shared foreign assistance goals of Peace and Security, Governing Justly and Democratically, Investing in People, and Humanitarian Assistance. In addition, USAID is the acknowledged world leader in our commitment to incorporating effective environmental impact assessment into all of our actions.

This year in his Earth Day statement, Administrator Shah noted:

For more than 30 years, the Agency has supported projects that promote conservation of species and habitats in ways that reduce poverty and increase incomes. USAID works with local communities, governments and international partners to improve the management of more than 100 million hectares of natural areas annually.

USAID has established and implemented environmental policies to protect the recipients of development assistance and the natural resources of their countries. In a landmark case it was determined that the same environmental protections we enjoy in the United States should be maintained in our work abroad. To meet this goal, USAID developed Federal regulations and formal procedures to incorporate environmental considerations into its program planning and implementation. In accordance with sections 117(c), 118, 119, and 621 of the Foreign Assistance Act of 1961, as amended (the FAA), USAID has established formal procedures detailed in 22 CFR 216 (USAID's Overseas Environmental Compliance Procedures) that apply to its foreign assistance programming to ensure that environmental factors and values are considered and integrated in the Agency's decision making and implementation processes. These procedures are consistent with Executive Orders (EO) 12114 and 13514, and the purpose and intent of the National Environmental Policy Act of 1970 (NEPA). Since the 1970's, these procedures have been routinely applied to every program, project, and activity USAID funds to ensure the wise use of taxpayer money through thoughtful, environmentally sound economic development. Every other major bilateral aid agency around the world, as well as the multilateral development banks and the United Nations organizations have followed USAID's lead in establishing environmental impact assessment procedures for their activities.

Building on its international experience, USAID can apply technical expertise and dedication to the implementation of programs and processes that protect the environment and promote sustainability in its domestic operations. USAID will develop a corresponding Federal regulation and policies to implement, monitor progress and evaluate its domestic operational activities. Identifying and maintaining current and consistent data that can be used for this purpose is one challenge that must be overcome.

III. Greenhouse Gas Reduction Goals

USAID personnel are located in three buildings in the Washington, D.C metropolitan area. The locations are:

- *Ronald Reagan International Trade Center (RRB/ITC)*, 1300 Pennsylvania Avenue, N.W.; 1943 personnel; owned and operated by the General Services Administration
- *SA-44*, Federal Center Plaza II, 400 C Street, SW, Washington, DC 325 personnel; privately owned and operated by the General Services Administration
- *USAID Technology Hub*, Twin Towers II, 1100 Wilson Boulevard, Arlington, Virginia; 300 personnel; privately owned and leased through the General Services Administration

USAID leases space in each of these buildings, and as a tenant relies on the terms in its Occupancy Agreements with GSA. The Agency does not purchase energy or water directly from a utility source. Further, our fleet of domestic vehicles is under the threshold of the EO reporting guidelines. Consequently, USAID is not establishing any targets for greenhouse gas (GHG) reduction under Scope 1 and 2. This determination was reported in the Scopes 1 and 2 report to Office of the Federal Environmental Executive on January 4, 2010. USAID's primary location is the RRB/ITC. Through the RRB/ITC Interagency Council, USAID will collaborate with GSA and other RRB federal agency tenants to reduce overall greenhouse gas (GHG) emissions from the building.

The reduction of Scope 3 emissions will be the primary focus of this Agency Sustainability Plan (ASP). The most effective first year target areas for GHG emission reductions at USAID are business air travel and employee commuting. USAID will also undertake initiatives under this plan to improve water use efficiency, reduce waste, and support electronic stewardship.

USAID is establishing a target reduction of 7% in business air travel emissions over the course of the next three years. This reduction in Scope 3 emissions would be against the FY 2009 baseline. The supporting calculation of the Agency's baseline Scope 3 emissions from business air travel is provided in Section II.2 of this plan. In order to calculate its baseline emissions from business air travel, USAID used the calculation standards and tools of the Climate Leaders Greenhouse Gas Inventory Protocol, which is based on the Greenhouse Gas Protocol Developed by the World Resources Institute and the World Business Council for Sustainable development. Data on annual air flight miles travelled, from the Agency's E-2 Travel Management System was used to calculate the baseline emissions level. During the coming year, USAID will conduct a further analysis of the information contained in the E-2 system to identify trends in travel patterns and to develop further plans to reduce GHG emissions. USAID does not currently use GSA's Travel Management Information System, however, GSA has recently developed an application which is designed to help agency meet regulatory requirements, manage travel spending and the effectiveness of its program and lower cost through improved strategic sourcing. USAID will evaluate the feasibility and cost of using the GSA system as a tool to assist in the management of the reduction of the Agency's emissions.

In conjunction with this travel data and systems review, USAID will update its current travel policies to incorporate the use of Video Teleconferencing (VTC) as an alternative to business air travel. A database system which tracks VTC usage as well as travel is currently being piloted in two of USAID's technical offices. The results of these pilots will be assessed for Agencywide application. Given the Agency Mission, there are some specific cases where teleconferencing will not suffice, such as travel related to disaster relief and assuming Post assignments. The requirement to continue these types of travel will make meeting the reduction target more challenging.

USAID will conduct a comprehensive travel survey to gather information regarding employee commuting and business air travel. The employee commuting portion of the survey will be based on guidance provided by the Department of Transportation. The survey will solicit information from Washington, DC based Agency employees about their travel habits, in order to identify eco-friendly alternatives for transportation to and from work. The business air travel portion of the survey will solicit responses about the frequency and nature of their travel.

The purpose of this survey is to establish baseline figures for reporting under this EO. These baseline figures will enable USAID to establish GHG reduction goals based on decreased business air travel. The goal is to use the data to determine the need for new employee commuting and business air travel policies and procedures.

IV. Plan Implementation

The Bureau for Management, Office of Management Policy, Budget and Performance (M/MPBP) is responsible for coordinating implementation of the requirements of the EO. The Director of M/MPBP reports to the Assistant Administrator for Management (AA/M), who is the Agency's Senior Sustainability Officer (SSO).

As part of the implementation process, under the leadership of the SSO, M/MPBP convened the Agency Environmental Council (AEC) to perform a review of operational activities. The AEC is composed of senior level technical and management personnel. The goal of the AEC is to ensure that compliance on operational environmental initiatives is undertaken with the same rigor as applied by the Agency to overseas activities governed by 22 CFR 216 (USAID's Overseas Environmental Procedures). The AEC is also ensuring environmental compliance for the American Recovery and Reinvestment Act (ARRA) funds received by the Agency. The AEC will continue to provide technical advice for ASP implementation.

USAID's Business Transformation Executive Committee (BTEC) will serve as the governance body for the implementation of the Sustainability Plan. BTEC provides agency-wide leadership for initiatives and investments to reform USAID business systems and improve organizational performance, efficiency and effectiveness. The SSO is the co-chair of BTEC. BTEC's membership is composed of the Deputy Assistant Administrators of the regional and pillar bureaus, Directors of independent offices and business owners of agency operational systems. Revised policies and procedures associated with the implementation of the ASP will be reviewed by the BTEC, and recommendations will be made to the Administrator for decision.

USAID's ASP communications strategy includes goals to gain support and recognition of the Agency's commitment to a sustainable workplace. The strategy includes educational campaigns, a speaker series on various environmentally-charged topics, online forums to solicit ideas for greening the Agency, and the issuing of various challenges to encourage employee involvement. Further, the Agency will use various outreach methods and websites to reach the public. USAID will use existing informational platforms to communicate with staff and senior management. Monthly updates from the SSO to overseas Missions, Agency Notices, Executive messages, use of the Agency newsletter "Frontlines", and the Agency website, will be the primary means of communication with employees. The USAID Open Government website at www.usaid.gov/open will be used to communicate with the public.

Initial budget requirements were identified as part of the development of this Plan. USAID will determine additional budgetary impact as it begins implementation of specific initiatives and additional data becomes available. As the Agency goes through the process of setting the FY 2011 Operating Year Budget, the budget team will prioritize activities which support the ASP.

V. Evaluating Return on Investment

In order to identify priority areas for implementation, USAID completed an evaluation of existing or planned initiatives that could be accelerated in support of the EO. Consideration was given to those items that were already requested in annual budgets and could have the broadest impact and contribute to both short and long-term cost savings. For example, USAID's Information Technology Strategy included expansion of VTC. The link to the ASP provides additional justification in support of associated resource requirements.

As discussed in other sections of this ASP, USAID has limited baseline data for several of the goals, including employee commuting and business air travel. However, USAID will continue to identify sources of data and effective methodologies to further evaluate the return on investment (ROI) of each of the initiatives contained in the Plan. A data management plan will be developed to support ROI analysis in future progress reports. Further, using the standards and metrics established in this plan, progress against the ASP will be evaluated and reported to the SSO and communicated to the Administrator.

VI. Transparency

USAID is committed to communicating its green initiatives through a variety of external and internal outlets. The ASP, as well as the results of staff surveys, will be available on the USAID Open Government website at www.usaid.gov/open. Current information and progress reports, as well as topic specific articles, will be developed to inform the general public, media, Congress, and the overseas community of the agency's efforts to reduce GHG emissions. Similarly, internal communication and transparency is vital to gaining support and commitment from USAID staff. Agency Notices, online communities and forums, and staff surveys will be used to engage and educate the organization. As we increase our ability to collect data and analyze data on GHG reductions, we will create and implement a Sustainability Dashboard that will be available to USAID staff and the public. As the governance body for the Plan, BTEC will ensure transparency of decision-making related to new policies, procedures and infrastructure investments.

Section 2: Performance Review & Annual Update

I. Summary of Accomplishments:

USAID is committed to reducing our environmental footprint in all of our office locations, both domestically and overseas. The Office of the Chief Information Officer (OCIO) is implementing its plan to relocate its contractor and direct hire staff to a new building. The USAID "Tech Hub" will occupy space within the Environmental Protection Agency's Leadership in Energy and Environment Design (LEED) Gold Certified Potomac Yard Buildings in Arlington, Virginia. USAID will lease this space and anticipates a move-in date early next year. Both contractor and direct hire personnel from three sites will be housed at the Potomac Yard location. USAID will pursue the LEED Silver Rating for this project. This effort symbolizes the Agency's commitment to a sustainable workplace and sets a new standard for USAID space in Washington.

In 2007, the OCIO implemented server virtualization on AIDNET (the Agency's Information Technology (IT) production network in Washington). This environment consists of VMWare ESX host servers with storage provided on NetApps storage devices. A VMWare environment was first implemented on the development and test network (called "Devnet"), and once successfully proven, was replicated on the AIDNET. Since implementation, the OCIO has worked to migrate applications and server "instances" off of physical server devices and onto the VMWare environment where "virtual" servers can be created quickly and very easily. As applications and services are migrated, the physical servers can be decommissioned and removed from the data center. This reduces the "footprint" where space, HVAC, and power are concerned, and simplifies the support burden. Also, for application owners, the virtual environment brings benefits of increased up time, as changes can be made to a virtual server with less user impact. Further, the VMWare environment allows for built in redundancy, providing a much more stable environment for the applications. As funding becomes available, OCIO will build on the solid VMWare base in place today.

New applications are not planned for standalone physical servers, and instead are installed in the VMWare environment unless technical issues make that impossible.

With passage of the Secure Embassy Construction and Counterterrorism Act of 1999 (SECCA), USAID now partners with, or follows the design guidelines of the Department of State's Office of Overseas Building Operations (OBO). In the limited instances where USAID is responsible for new construction or building renovations overseas, the Agency implements design strategies that reduce the effects of the local climate, reduce energy consumption and reduce our effect on the local natural environment. For example, in January 2010, the Regional Development Mission for Asia, located in Bangkok, Thailand, earned the Silver LEED Certification.

Finally, The Bureau for Management, Office of Management Policy, Budget and Performance (M/MPBP), in coordination with the General Services Administration (GSA), focused on Earth Day, April 22, 2010, to promote the Sustainability Plan within the Agency. GSA hosted tours of the recycling and energy centers of the Ronald Reagan Building M/MPBP distributed informational materials and conducted a raffle to engage Agency employees.

II. Goal Performance Review

1 . GOAL: Scope 1 & 2 Greenhouse Gas Reduction

a. Goal description - USAID has not established a target under Scopes 1 and 2 as reported to the Office of the Federal Environmental Executive on January 4, 2010. However, USAID will support the intent of EO 13514 by initiating actions to reduce the GHG emissions.

b. Agency lead for goal – Bureau for Management's Office of Administrative Services and Office of Management Budget, Policy and Performance.

c. Implementation method – Some examples of planned actions include:

- Replacing fluorescent light tubes in the RRB/ITC from the current 33 watt models to 25 watt ultra low mercury models.
- Encouraging staff to turn off personal computer monitors and lights at the end of each work day. "Caught in the Dark" campaign.
- Installing motion sensors on light switches throughout the USAID space.
- Employing the use of "Wake-on LAN" devices that allow for remote updates to personal computer system.
- Exploring with GSA the feasibility of installing a utilities sub-metering system for the USAID space in the RRB.

d. Planning table – N/A

e. Agency status - It is difficult to obtain specific information about Agency usage levels for utilities because there is no sub-metering within the RRB complex. Based on the Occupancy Agreement between USAID and GSA, utility expenses are computed as a function of square footage of office space occupied in the RRB. USAID occupies 28% of the office building space and accordingly pays 28% of the aggregate utility bill. USAID and GSA acknowledge that this

does not provide the best utility expense data thus making it difficult to determine efficiencies achieved by an individual tenant.

However, USAID has developed a plan and budget, in conjunction with GSA, to replace and retrofit building systems and fixtures with energy efficient products. Additionally, USAID will use an informational campaign, "USAID Unplugged", to educate Agency employees about energy conscious behavior and promote reductions in overall usage.

2 . GOAL: Scope 3 Greenhouse Gas Reduction

Employee Commuting

a. Goal Description – Analyze the commuting habits of domestic USAID staff to determine measures beyond the current subsidized program that can be taken to reduce GHG emissions related to work transit.

b. Agency lead for goal – The Bureau for Management, Office of Administrative Services is responsible for program planning, implementation and evaluation of the Agency's employee transit program. The Office of Human Resources has responsibility for the creation and oversight of personnel policies that support telework, alternate work schedules and other flexible work options. USAID will review and revise existing policy to provide managers and their staff a broader set of options to support work accomplishment.

c. Implementation methods – While USAID has a robust Metro-Check program in place and subsidized parking for carpool drivers, there appears to be an opportunity to further reduce GHG emissions produced by the daily commute to Agency offices. During the 1st Quarter FY 2011, USAID will conduct a Washington metro area survey, based on the Federal Employee Survey, to determine the means of transportation currently used by USAID employees to travel to work. The survey will continue to be administered on an annual basis. Data analysis will: a.) set baseline numbers for comparison for subsequent years; and b.) reveal areas where the Agency can assist employees who are attempting to find more environmentally friendly means of travel to work.

USAID will work with GSA through the interagency council to improve the basic facilities needed to foster increased Human Powered Transportation (Walking, Running, Bicycling) HPT. As part of the Agency's greening effort and Earth Day activities, USAID arranged a tour of the Ronald Reagan Building. During the tour we realized that sufficient shower, locker room, and bicycle storage facilities were not available for USAID employees. Anecdotally, there appears to be unmet demand for bike storage and shower facilities.

USAID already has in place mechanisms for employees to work alternative and compressed work schedules and to include a telecommuting element in their work schedule that will result in fewer commuting days, and more off peak travel which takes less time and energy. USAID will continue to seek ways to optimize these options.

d. Planning table – A planning table will be included in the FY 2011 Agency Sustainability Report after the commuter survey has been conducted and the data has been analyzed.

e. Agency status – USAID anticipates some budgetary outlay in order to implement the proceeding programs and will develop budget estimates as the details of each initiative is planned. However, the costs associated with the survey are expected to be minimal and would not impede its implementation on schedule. The employee commuting habits survey is

critical to determining additional costs the Agency will need to incur to expand or implement new programs. Cost estimates for designing and/or constructing additional facilities for HPT support will be developed following discussions with GSA.

Business Air Travel

a. Goal description – Expand the use of VTC and other communications technologies to minimize the need for business air travel.

b. Agency lead for goal – The Bureau for Management, Office of Administrative Services (M/AS) provides management and oversight of the Agency's travel program and policies.

c. Implementation methods – USAID employees travel extensively around the world in order to implement the Agency's mission. Even with the advancement of technology and communication systems, much of the Agency's work continues to require travel to USAID's overseas Missions. Face to face interaction with host country residents, organizations and governments continues to be a foundational element of successful implementation of USAID's programs.

Within this context, USAID will seek ways to reduce the Agency's carbon footprint associated with international travel. As part of the its Information Technology Strategy, USAID is expanding the availability of high quality, reliable, and secure means of VTC in Washington and overseas. Conference rooms, desktops, and laptops will be equipped with VTC capabilities so that Washington and the missions can communicate effectively. For example, within the RRB/ITC, there are at least two VTC equipped conference rooms on each floor for employee use in addition to the availability of mobile VTC equipment. The expansion of Web conferencing and communications will also support the accomplishment of the GHG reduction goal.

Concurrent with the use of these technologies, USAID will make policy changes to reflect the mandate to conduct business in a manner consistent with the new environmental consciousness. Concurrent with expanded availability of VTC, USAID will review its travel policies to promote its use and provide a related decision matrix when considering business air and ground travel. These policy changes will elevate the threshold for travel justifications including a requirement that specific criteria be met. For example, USAID will explore the concept of GHG budget allocations and tracking by Operating Unit to assist managers in decision-making related to business air travel. USAID will also explore the use of systems to capture the use of virtual alternatives to travel to identify areas for further enhancement. For example, USAID will evaluate a pilot system currently being used to track technical assistance travel and mission support by USAID/Washington personnel. This system captures data on virtual as well as direct on-the-ground support provided to missions. Policies associated with travel logistics will also be refined to include evaluation of the most cost and GHG efficient routes, lodging and rental vehicles.

Although there will be initial costs associated with the purchase, installation and maintenance of the hardware, we believe that a reduction in international travel will accrue long-term cost savings as well as a reduction in GHG emissions.

d. Planning table – The Agency used data from its E2 Solutions travel management system which is a web-based travel authorization (TA) and voucher application to determine the annual employee travel mileage.

The Climate Leaders Greenhouse Gas Inventory Protocol Core Module Guidance was used to develop USAID’s baseline GHG emissions calculation. Using the Long Haul, EPA Emission Factors for Airline Travel, USAID used total miles travelled in FY 2009 to determine our baseline CO2 emissions. The Agency used the Long Haul designation, because virtually all flights originating from Washington are at least 700 or more miles in distance. Finally, all air travel that is less than 700 miles would likely utilize aircraft with a different emission to passenger per mile ratio.

USAID is targeting a 7% reduction in air travel over the course of the next three years. Travel related to disaster relief and travel to Missions to assume a post is unavoidable based on the Agency’s responsibility. With increased use of VTC and any revisions to travel policy and procedures based on data obtained based on implementation of this ASP, USAID believes that a 7% reduction in business air travel over the next 3 years is an attainable goal. Over the course of the next fiscal year, the Agency will continue to monitor and evaluate travel-related data and make revisions to our reduction goals accordingly.

Environmental Protection Agency (EPA) Emission Factors for Airline Business Travel
 $E = PMT * (EF_{CO2} + EF_{CH4} * EF_{N2O} * .310)$

- E = Total CO2 – Equivalent Emission
- PMT = Passenger Miles Traveled
- EF_{CO2} = Emission Factor
- EF_{CH4} = CH4 Emission Factor
- EF_{N2O} = Emission Factor
- 0.021= Conversion Factor
- 0.310 = Conversion Factor

Total CO2 – Equivalent Emission: 66,666.363 = 37,308,391 (.185 + .0104 * .21 + .0085 * .310)

e. Agency status – USAID anticipates two significant budgetary requirements for the forgoing programs. First, USAID has yet to develop a survey design and implementation plan for the commuting and business air travel survey. Consequently, there is no cost estimate for its execution. Second, USAID does not currently use the GSA’s Travel Management Information System (TMIS) and would need to complete a cost benefit analysis to determine the usefulness of its functionality. While E-2, USAID’s travel management system, does not readily provide necessary data, it may be most cost effective to work with the vendor to make modifications to the system to capture information required as opposed to moving to the TMIS.

SCOPE 3 GHG TARGET	Units	FY 10	FY 11	FY 12	FY 13	FY 14	FY 20
Sub-Target for Federal Employee Travel	%	0	2	5	7		

3 . GOAL: Develop and Maintain Agency Comprehensive Greenhouse Gas Inventory

Compliance with this EO represents the first time that USAID has embarked on an effort to account for domestic GHG emissions. Consequently, USAID does not have systems in place that provide comprehensive data to develop an inventory. As part of its strategy, USAID will

evaluate data sources and systems that can provide the information to develop and maintain a GHG inventory. Additionally, USAID will hire a Bureau for Management Environmental Officer who will provide technical direction, oversight and management of the inventory, as well as other aspects of this ASP. USAID will work to fill this informational gap in the coming year. Updating systems to accurately provide data in a new format or request data never before requested can be a lengthy and challenging process. Notwithstanding these challenges, the Agency is committed to this endeavor.

4 . GOAL: High-Performance Sustainable Design / Green Buildings

N/A

5 . GOAL: Regional and Local Planning

N/A

6 . GOAL: Improve Water Use Efficiency and Management

a. Goal description – USAID has not established a goal related to improving water use efficiency and management because the Agency does not purchase or manage its water utilities directly. However, USAID plans to begin implementation of a systems retrofit plan that will have a positive impact on the Agency’s water usage.

b. Agency lead for goal – the Bureau for Management’s Office of Administrative Services and Office of Management Policy, Budget, and Performance will work closely with GSA to retrofit the USAID space within the RRB with eco-friendly improvements.

c. Implementation methods – Potential retrofits for the USAID space in the RRB include low flow toilets, improved efficiency one flush toilets and automatic water control faucets and flush controls.

d. Planning table – While USAID is not responsible for waste water management, consistent with guidance, the Agency used the total number of direct hires located in the RRB to populate the Contracted Waste Water Treatment table. The table is Attachment #2.

e. Agency status - USAID’s water use is accounted for and reported on by GSA consistent with the terms of the Agency’s occupancy agreement. The Office of Administrative Services has responsibility for facilities management and has developed with GSA a budget and plan to retrofit building systems beginning in FY 2011. Retrofits of all Agency bathrooms are expected to be completed by the end of FY 2011. Although USAID is unable to compute a specific reduction in waste water because there is no sub-metering of water services, we anticipate a reduction of waste water upon completion of the restroom retro fit with low-flow efficient flush toilets and motion activated faucets and toilet flush controls.

7 . GOAL: Pollution Prevention and Waste Elimination

a. Goal description – GSA is responsible for the RRB/ITC recycling program. Data on the volume of recycling from the building is compiled in aggregate which makes it impossible to track the level of recycling done by Agency personnel. Based on GSA’s methodology for distributing recycling proceeds, USAID is credited with 28% of proceeds based on the total space square footage occupied by the Agency. USAID will undertake an intensive effort to substantially expand desktop recycling and the type of products being recycled.

b. Agency lead for goal – the Bureau for Management’s Office of Administrative Services and Office of Management Policy, Budget, and Performance will work closely with GSA to revitalize the recycling program within the USAID space in the RRB.

c. Implementation methods – Specific actions include:

- Working with GSA on the development of a *new statement of work for GSA contractors responsible for recycling and waste management services within the RRB*. Although a recycling program exists, improvements must be made to streamline and improve the recycling process.
- *Aligning recycling practices among USAID staff, GSA contractors, and recycling laws for the District of Columbia*. The Agency will work to align the recycling practices among USAID staff, GSA contractors, and the District of Columbia. USAID will work with GSA to ensure their contractor is aware of requirements of and will educate USAID staff on recycling best practices.
- *Replace or retrofit existing recycling bins to accommodate recyclable containers and identify additional locations for bins throughout the USAID space*. Recycling bins are available in the galleys of each floor of the USAID space within the RRB. As the number of items able to be recycled increase, the current bins no longer accommodate certain items. USAID will purchase new bins for the galleys or retrofit the containers to expand the items that support a robust recycling program.
- *Expand the use of deskside recycling containers and paper recycling boxes within personal office space to encourage greater staff participation in the recycling program*. The use of deskside containers will increase USAID staff participation in the recycling program by making the opportunity to recycle readily available. Reduce Printing Paper Use.

Two of the goals within the Sustainability Plan, Information Technology and Sustainable Acquisition, address the requirement of reducing the use of printing paper by embracing technology and purchasing modern printing equipment. USAID has identified the following areas for focus:

- *Phase-in restrictions on the use of personal printers by limiting the acquisition of printer ink and toner*. Although the use of personal printers is convenient, it encourages the printing of documents that may be unnecessary or wasteful. The Office of the Chief Information Officer is determining the cost benefit and change management approach to phasing out the use of personal printers. USAID staff would be required to use multi-functional devices that allow for double-sided printing, scanning, and faxing, and require a more conscience decision before printing unnecessary documents.
- *Invest in multi-functional devices for each office that support double-sided printing as well as scanning and faxing*. The Office of the Chief Information Officer has determined that the acquisition of multi-functional devices, which allow for double-side printing, faxing, and scanning, will help reduce the consumption of paper and encourage electronic collaboration for documents development. The multi-functional devices will be purchased for each office and will support the phase-out of personal printers and single-sided printers.

- *Identify software that encourages online collaboration and communication to reduce the amount of documents requiring printing.* Online collaboration sites, such as Microsoft SharePoint, encourage document sharing over an electronic medium. Online collaboration sites reduce printing by allowing document sharing and simultaneous editing. These sites also provide substantial space for saving multiple versions of documents and eliminating the need for a tangible filing system.

d. Planning table – N/A

e. Agency status – Steps have been taken to research the best way to implement a new recycling program within the RRB. Various locations have been identified throughout the RRB space for new recycling bins and steps have been taken to being educating USAID staff on proper recycling measures. The Office of the Chief Information Officer have started planning their phase-out and consolidation of personal printers and expansion of multi-functional devices.

8 . GOAL: Sustainable Acquisition

a. Goal description – Develop an Agency Affirmative Procurement Plan.

b. Agency lead for goal – Bureau for Management’s Office of Administrative Services provides logistical support services and administrative services in USAID/Washington. The Director serves as the Agency’s Environmental Executive promoting an affirmative program for use of environmentally sound, energy-efficient products.

c. Implementation methods – USAID is assembling a team to develop requirements and establish procedures for procuring environmentally sound and energy efficient products (e.g. copiers, paper, etc) as part of the Agency’s overall acquisition strategy.

d. Planning table – N/A

e. Agency status – N/A

9 . GOAL: Electronic Stewardship and Data Centers

a. Goal description – Reduce the carbon footprint of Information Technology (IT) through the virtualization and consolidation of IT software and systems and deployment of power efficient equipment.

b. Agency lead for goal – The Office of the Chief Information Officer (OCIO) is responsible for overseeing planning, prioritizing, developing, contracting, operating, and maintaining the Agency’s information and communications technology resources.

c. Implementation methods – Specific actions include:

- **Video Conferencing in Washington**

The availability of secure, high quality video conferencing is an important component of for USAID’s greenhouse gas reduction targets related to business air travel. Video teleconferencing (VTC) tools are in some of the USAID/Washington offices and missions; however the equipment is old, not of a standard configuration, and not implemented in a manner that makes use of the equipment simple and straightforward. Planned investments would replace the VTC hardware and software installed in the

- **Desktop collaboration**

OCIO has been evaluating tools to support collaboration across the USAID worldwide network environment. These tools typically provide document sharing, support distance learning and virtual meetings through desktop and conference room video conferencing, and often allow for instant messaging/chat features to allow teams separated by geography, to work closely and collaboratively on projects. Also, having effective collaboration tools at the immediate disposal of all Agency staff worldwide will mean that virtual teams can form quickly and easily, tapping into expertise no matter the location. This will result in more effective project planning and implementation at a lower cost, and is expected to reduce travel requirements and in some cases eliminate them.

- **Server Consolidation**

OCIO implemented server virtualization on AIDNET in 2007. The environment consists of VMWare ESX host servers with storage provided on NetApps storage devices. A VMWare environment was first implemented on the development and test network (called "Devnet"), and once successfully proven, was replicated on the AIDNET production network in Washington. Since implementation, the OCIO has worked to migrate applications and server "instances" off of physical server devices, and onto the VMWare environment where "virtual" servers can be created quickly and very easily. As applications and services are migrated, the physical servers can be decommissioned and removed from the data center. This reduces the "footprint" where space, HVAC, and power are concerned, and simplifies the support burden. Also, for application owners, the virtual environment brings benefits of increased up time, as changes can be made to a virtual server with less user impact. Also, the VMWare environment allows for built in redundancy, providing a much more stable environment for the applications. As funding is available, OCIO will build on the solid VMWare base in place today. New applications are not planned for standalone physical servers, and instead are installed in the VMWare environment unless technical issues make that impossible.

- **Laptops**

The OCIO is developing a new network design that will allow for broader use of laptops and mobile devices on the USAID network. Today, laptops may be used on AIDNET; however, if the owner takes the laptop "outside" and connects it to an external network, the laptop is reimaged upon return to avoid any virus or malware from infecting the USAID network. This limits the effectiveness of having a laptop or other mobile device. The OCIO is designing a solution that will allow for more mobility while still ensuring the security of our network. The project is in the early phases, and full funding has yet to be identified.

- **Wake on LAN**

USAID's network security is strong. This is due in large part to the automated security patching process the OCIO team has had in place for a number of years. Security

d. Planning table –

Electronic Stewardship and Data Centers	Units	FY10	FY11	FY12	FY13
% of device types Energy Star <i>Comments:</i> Estimated check in May 2010	%	15	30	60	
% of cloud activity hosted in data center <i>Comments:</i> Estimate based on 8 applications either SaaS or PaaS in GAO cloud report	%	10	25	50	
% of agency data centers independently metered and monitored weekly <i>Comments:</i> Assuming we can work with facilities providers to add metering	Number	0	1	2	
Reduction in the number of agency data centers <i>Comments:</i> USAID adding a DR data center in addition to production	Number	1	2	2	
% of agency electronic products with power management/environmentally preferable features in use <i>Comments:</i> Based on default power management settings on desktops/printers	%	0	25	30	
% of agency data centers with an average CPU utilization of 60 – 70% <i>Comments:</i> Assuming increase in virtualization/consolidation	%	0	50	75	
Electronic Stewardship and Data Centers	Units	FY10	FY11	FY12	FY13
% of agency data centers at a PUE range of 1.3 – 1.6 <i>Comments:</i> USAID would have little control over the facilities providers having available data to measure this	%	0	0	0	
% of covered electronic product acquisitions that are EPEAT-registered <i>Comments:</i> Based on refresh of equipment and appropriate equipment being available in this category	%	9	30	60	
% of agency data center activity with virtualization <i>Comments:</i> Assuming requested funding available for virtualization	%	10	50	75	

e. Agency status – Investments in information technology will increase the capacity of the workforce, enabling employees to collaborate and achieve Agency objectives from diverse and distant locations while reducing costs, greenhouse gas emission and carbon footprint.

1 0 . GOAL: Agency Innovation

The best way to communicate USAID's Agency Innovation is to provide examples of projects USAID is currently implementing overseas that promote GHG emission reductions. The connection between USAID's mission objectives and the environment is well established. Internationally, USAID is a leader within the donor community and has achieved lasting results with its programs. The results of projects around the developing world demonstrate the positive return on investment that can be realized in developing communities.

In its development programming, USAID maintains three primary goals with regard to the environment. First, each USAID project is designed to have the least possible negative impact on the environment, and prevent any harm to the environment in the implementation of the project. Each program bureau in the Agency has an environmental executive who evaluates projects based on the forgoing criteria. Second, the Agency seeks to implement projects that protect, and best utilize the environment to the benefit of the host nation. GHG, water safety, protected regions, and alternative energy sources are an example of the programs that USAID implements on a regular basis. Finally, with the implementation of this EO, the Agency will seek to gain a better understanding of our environmental impact domestically, and create programs to reduce our carbon footprint. The Science and Technology Office is currently establishing a program for the Agency to be fully carbon neutral.

Attachment #2, *Jamaica Conserves Its Forests, One Community at a Time*, and Attachment #3, *Developing Countries Respond to Climate Change*, contain an excerpt about USAID's programs which appeared in the Agency newsletter, *Frontlines*, and details the forward thinking coupled with focused action that is making a difference on a global scale.

Section 3: Agency Self Evaluation

Not applicable for this submission.

Attachment #2: Case Study – Jamaica Conserves Its Forests, One Community at a Time

Frontlines – December 2009/December 2010



Under a USAID project, residents of Flagstaff, Jamaica, received training in conservation and tourism including food preparation, customer

service, and craft development.

Cockpit Country, Jamaica, is a UNESCO World Heritage site that is home to over 1,500 plant and animal species endemic to Jamaica, such as the Jamaican yellow boa and the giant swallow-tail butterfly. Its wet limestone forest is the largest remaining primary forest in Jamaica.

The region boasts a strong historic appeal as it is the home of the famed Maroons, a population of freed and runaway slaves who established independent communities and forced the British colonial rulers of the island to sign a peace treaty in 1738.

Eighty-eight communities span landlocked Cockpit Country across the parishes of St. Elizabeth, Trelawny, and St. James.

Many residents farmed in ways that harmed the environment, including clearing and burning forests and illegally removing plants.

Yam farming, for example, is one of the major income earners, but it requires cutting down many young trees for “yam sticks”—poles used to hold up yam vines. This resulted in yearly losses of hectares of forest—a habitat for the region’s species.

Innovative Response

Through the Protected Areas and Rural Enterprise project (PARE), USAID helped conserve Cockpit Country’s biodiversity and promoted environmentally friendly ways for people to earn a living.

As a forest reserve and home to significant Jamaican heritage, the area was ripe for the development of tourism.

Flagstaff, originally called Trelawny Town and one of five original Maroon villages, is one community where residents participated in a series of conservation training workshops. The “training of trainers” approach was applied so that they could pass on what they had learned to neighboring communities.

The conservation education program, conducted in partnership with The Nature Conservancy, introduced yam farmers to an alternative, fast-growing tree for use as yam sticks and provided training for land preparation, pruning, and propagation.

The program also bought native plants to reforest 13 hectares of land under the guidance of the Forestry Department. Forest lands that had once been converted for agriculture and then abandoned were also replanted with native trees.

Flagstaff residents received training in business planning and marketing, food preparation, and customer service as well as food and craft product development.

Karen Hilliard, USAID’s Jamaica director, said of her first trip to Flagstaff in 2007: “I saw the birth of a community- led initiative with vast potential and so it is a pleasure to see their tremendous progress.”

Results

Since the project's start, several neighboring communities have contacted the Forestry Department to establish their own committees. Officials say the spirit of conservation is catching on.

Calvin Shirley, who attended commercial food preparation training, said people are more confident in themselves as businesspeople and as artisans. "There has been a dent in rural migration since the project began because they don't have to leave the community to find work as they have the skills they can apply and the raw materials they can use right here," he said.

To promote the site's rich heritage, PARE worked with residents to develop tours and trails as a community tourism attraction. The tour includes a newly renovated visitor's center as well as signs to enhance the experience.

The residents established an artisan cooperative and a formal product line of Cockpit Country merchandise that is available at the visitors center. A private company developed the Cockpit Country brand to direct future marketing and promotion of "eco-tourism" sites.

The Ministry of Tourism has given its stamp of approval and joined USAID and the Flagstaff Local Forest Management Committee to formally open the Flagstaff Heritage Tours and Trails to the public.

Attachment #3: Case Study – Developing Countries Respond to Climate Change

Frontlines: April 2010

By Ben Barber



A USAID -supported program in Brazil trains youth for energy jobs. Here, youth in São João learn how to install solar panels to power a computer center.

For two decades, a fierce battle raged in the media and public square pitting environmentalists against industry leaders as the world struggled to understand and react to the changing climate.

Today, overwhelming scientific evidence has led to a consensus among scientists that climate change is real, is caused by human activities, and demands immediate action.

Scientists report a rise in carbon dioxide levels in the atmosphere and a subsequent rise in sea levels—caused by warming oceans that expand from absorbing carbon dioxide, not melting glaciers—as well as unusual swings in the global climate system. There have been droughts in some regions, bigger-than-usual storms in others.

The United States and other industrialized countries have begun to address climate change, but experts fear these actions may not be enough. More than 90 percent of carbon dioxide emissions growth from now until 2030 will come from the developing world, according to the International Energy Agency.

As the world's largest aid donor to developing countries, the United States has worked for decades to boost economic growth and help these countries cope with the effects of climate change such as floods, famine, storms, drought, and the loss of grazing land and wildlife.

USAID also helps countries develop and adapt to climate change without emitting large amounts of greenhouse gases.

Political leaders, government delegates, scientists, and activists gathered in Copenhagen in December 2009 for annual international negotiations on climate change—a follow up to the 1997 Kyoto meeting that produced the first global effort to rein in greenhouse gases.



Indian women trained through a USAID program prepare mango bars using a solar-powered dryer unit. Solar dryers in India enable farmers to efficiently use energy to turn excess produce into food and income off-season.

As part of the Copenhagen Accord, most countries agreed to scale back greenhouse gas emissions. A few refused, arguing that poor countries would be blocked from growth if they were forced to reduce greenhouse gases.

Into this cauldron of opinions and interests—involving scientists, economists, activists, developing countries, and industrial powers—USAID has contributed expertise and served as a voice for what works in poor countries. USAID is helping countries prepare for climate change while seeking new ways to grow.

Developing countries are especially affected by changes in climate because their economies are vulnerable, they are less able to change, and climate variability was already a challenge to them, said Bill Breed, USAID's top climate change specialist.

"The chemistry of the ocean is changing—it is becoming more acidic" from absorbing increased carbon dioxide in the atmosphere, Breed said. Acidic oceans disrupt food chains, which could reduce fish numbers.

There has been a change in precipitation patterns, he added—some places get more rain, others get less, and the timing and volume matter.

For example, in Kenya the seasonal rains that usually come like clockwork are becoming unpredictable. Droughts from 2003 to 2006 led to a 90 percent loss of livestock in some areas. As a result, nearly 11 million people required food aid.

"Such changes exacerbate existing development challenges," said Breed. "In the tropics, they affect countries already operating at the margins."



Children in southern Kazakhstan play near a water pump. USAID responded to water scarcity tensions in the country by increasing access to drinking water and irrigation.

The Agency provides information to help prepare for the effects of climate change such as rising seas, storm surges, droughts, and unpredictable rain patterns.

"We are making our projects and activities more resilient to climate change," Breed said.

Some crops, for example, may no longer be able to get the rain they need, or the rain may fall during flowering periods, which reduces fertilization. So experts are helping farmers breed crops that can thrive in new conditions such as heat, drought, and flooding. They also show farmers how to harvest water by building small structures to catch and hold water.

"The question one asks is if a place is going to be habitable in 10 or 15 years," said Breed. A community may require a change in crops or practices, or even that people move away to survive.

Breed suggested looking at Phoenix, Ariz., in the southwestern United States where the water table fell from 6 feet to 400 feet below the surface in some areas as aquifers were tapped to supply a growing population. In the U.S. case, ample power allows lifting of water to meet needs, but even here limits are increasingly apparent.

To help anticipate climate changes, USAID has set up geospatial observation centers with NASA and developing country institutions in Africa and Central America. The centers analyze satellite observations, historical data, local environmental information, and forecasts to help figure out how to adapt, manage the environment, and prepare for disasters.

The centers monitor changes in forests and land cover, greenhouse gas emissions, and red tides. They give advance warnings of thunderstorms, and identify places likely to be flooded.

The climate change experts also see an opportunity to “build settlements better” with improved drainage that can prevent flooding and water damage.



A farmer fetches corn from a mud silo at Janjori-Kukuo in Ghana. With USAID support, farmers in Ghana have improved their crop production as climate change puts additional stress on agricultural systems in Africa.

USAID also helps countries promote clean energy and make their utility sectors more profitable. Electricity is often subsidized in developing countries, which doesn't make economic sense since it is typically the rich, with the highest rate of consumption, who reap the benefits.

“Over the next 50 years we need to cut emissions [of greenhouse gases] by 50 percent from current levels,” said Breed. “We need ...clean technology. Although we need electricity, efficiency and conservation are part of the picture.”

USAID plans to help countries attract investment for clean development and enable their participation in carbon markets. The Agency is also working on pilot projects on carbon finance—paying people to reduce greenhouse gas emissions or increase carbon storage.

Protecting forests is a major factor in reducing climate change. In East Africa, USAID worked with 35,000 small-scale farmers to plant 4 million trees for carbon trapping, environmental benefits, and personal use. Farmers are paid for the carbon their trees take in and store.

U.S. funding for core international climate change efforts has grown from \$316 million in 2009 to more than \$1 billion in 2010 and reaches nearly \$1.4 billion in the administration request for 2011. USAID, the State Department, and the Treasury Department use this money to meet the challenges that come with a changing climate.

