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ADS Chapter 528

Energy Management and Planning Program for USAID Buildings

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ADS 528 - Energy Management and Planning Program for USAID Buildings

528.1 OVERVIEW

Effective Date: 05/14/2012

This chapter provides guidance and mechanisms for USAID to reduce energy use greenhouse gas emissions (GHG) in USAID's properties as required by [Executive Order 13423, Strengthening Federal Environmental, Energy, and Transportation](#) which superseded [Executive Order 13123, Greening the Government Through Efficient Energy Management](#) and was expanded in [Executive Order 13693, Planning for Federal Sustainability in the Next Decade](#).

This chapter addresses USAID owned and leased buildings, located both domestically and overseas; and buildings where either USAID or an alternate federal agency provides facilities management and services.

528.2 PRIMARY RESPONSIBILITIES

Effective Date: 05/14/2012

- a. The **Assistant Administrator for Management (AA/M)** serves as the Agency's Senior Sustainability Officer, and exerts overall responsibility for the execution of Agency energy management actions in response to Executive Order 13693 and other federal energy management regulations.
- b. The **Bureau for Management, Office of Management Policy, Budget, and Performance (M/MPBP)** is responsible for the development of an Agency Sustainability Plan which outlines energy management actions in meeting Executive Order 13693 reduction goals. The Director of M/MPBP coordinates Agency efforts in meeting these goals, and reports to the Agency Senior Sustainability Officer.
- c. The **Bureau Environmental Officer, Bureau for Management** prepares the Agency Sustainability Plan (ASP) updates, and advises Bureaus on energy management initiatives which further the energy reduction goals established in the ASP.
- d. The **Chief, Bureau for Management, Office of Management Services, Overseas Management Division (M/MS/OMD)**:
 - 1) Develops policy for the Energy Management and Planning Program for USAID's overseas buildings in collaboration with the Management Bureau, Management Policy, Budget, & Performance Office, Policy Division (M/MPBP/POL);
 - 2) Coordinates with the Department of State's Overseas Building Operations (OBO) at collocated Posts regarding acquisitions and leasing arrangements that impact energy management of USAID occupied

buildings; as well as establishes strategies and policies for user requirements, space planning utilization, and building operations.

- 3) Provides technical guidance on and monitoring compliance with government regulations that impact facility management abroad; and
 - 4) Provides input for procurement of energy-efficient products for use within USAID owned and leased space overseas.
- e. The **USAID Mission Director or USAID Principal Officer** at each post ensures that the Mission Energy Management and Conservation Plan is developed, and ensures that the Annual Report on Energy Management is submitted to M/MS/OMD.
- f. The **USAID Executive Officer (EXO)** or principal officer serving in that function at each post provides administrative direction and oversight for compliance with this directive.
- g. The **Chief, Bureau for Management, Office of Management Services, Headquarters Management Division (M/MS/HMD)** establishes strategies and policies for space planning and utilization at USAID/W headquarters. M/MS/HMD coordinates with the General Services Administration (GSA) on acquisitions and leasing arrangements that impact energy management of domestic USAID buildings.
- h. The **Bureau for Management, Office of Acquisition and Assistance (M/OAA)** develops, issues, and maintains the Agency's acquisition regulations, procedures, and standards, in accordance with established Agency delegations and requirements, and will promote a Green Procurement Program (GPP) for use of energy-efficient products that are environmentally sound and help meet energy reduction goals established in the Agency Sustainability Plan.
- i. The **Director, Bureau for Management, Office of the Chief Information Officer (M/CIO)** oversees, plans, prioritizes, develops, contracts, operates, and maintains the Agency's information and communications technology resources in a manner consistent with the Agency's energy management and reduction goals.

528.3 POLICY DIRECTIVES AND REQUIRED PROCEDURES

528.3.1 Energy and Water Management and Planning Program

Effective Date: 05/14/2012

As required by the [Energy Policy Act of 2005 \(EPAct 2005\)](#) and [Executive Order 13423](#), it is the Agency's goal to reduce energy consumption and to promote life cycle cost-effective investments in building energy systems, building water systems, and energy and water conservation measures for all USAID buildings. Section 102(a) of the requires federal agencies to reduce energy intensity every year in their buildings—on a

BTU per gross square foot basis, and from a FY 2003 baseline—by 2% per year beginning in FY 2006, up to a cumulative 20% reduction by the end of FY 2015.

Section 2(a) of [Executive Order 13423](#) requires all Federal agencies to improve energy efficiency and reduce greenhouse gas emissions of the agency, through reduction of energy intensity by (i) 3 percent annually through the end of fiscal year 2015, or (ii) 30 percent by the end of fiscal year 2015, relative to the baseline of the agency's energy use in fiscal year 2003. [Executive Order 13423](#) also requires agencies to implement within the agency environmental management systems (EMS) at all appropriate organizational levels.

As such, the Program will follow the guidelines set by the International Organization for Standardization (ISO 14004:2004) to establish and implement an environmental management system; and will demonstrate program effectiveness through standard ISO 14001:2004.

528.3.2 Methodology and Procedures for Life Cycle Cost Analysis

Effective Date: 05/14/2012

M/MS adheres to the methodology and procedure for life cycle cost analysis described in [10 CFR 436, Subpart A](#). The methodology and procedures entail

- a. Estimating and comparing the life cycle costs of U.S. Government (USG) buildings;
- b. Determining the life cycle cost effectiveness of energy conservation measures and water conservation measures;
- c. Ranking life cycle cost-effective measures in order to design a new USAID building or to retrofit an existing USAID building; and
- d. Establishing the method by which efficiency will be considered when entering into or renewing leases of USAID building space.

528.3.3 Energy Savings Performance Contracting (ESPC)

Effective Date: 05/14/2012

[42 USC 8287](#) provides the authority for the head of a Federal agency to enter into [Energy Savings Performance Contracts \(ESPCs\)](#) and sets the legal parameters for the program. ESPCs allow Federal agencies to accomplish energy savings projects without up-front capital costs and without special Congressional appropriations. USAID uses Energy Savings Performance Contracting where it is cost effective, and adheres to the policies in [10 CFR 436, Subpart B](#) and [EISA 2007, Title V, Subtitle B, Sections 511 – 518](#) in realizing energy and water reduction goals set forth in [Executive Order](#)

[13423](#) and [Executive Order 13693](#). [EPA Act 2005](#) provides additional parameters for ESPC period of performance.

528.3.4 Strategic Sustainability Performance Plans

Effective Date: 05/14/2102

USAID's multi-year Agency Sustainability Plan (ASP) establishes a framework for the Agency's environmental stewardship efforts, and reports on Agency initiatives intended to:

- a. Reduce energy consumption;
- b. Promote the efficient use of energy;
- c. Reduce solid waste generation;
- d. Reduce water consumption;
- e. Procure environmentally preferable supplies, good, and services through adoption of an Agency Green Procurement Plan; and
- f. Provides a methodology for reporting progress in meeting these goals.

528.3.5 Energy and Sustainable Design Conservation Measures

Effective Date: 05/14/2012

[Executive Order 13423](#) addresses energy efficiency for federal facilities and establishes guidelines for setting goals for these initiatives. [Executive Order 13693](#) seeks to establish a percentage reduction target for greenhouse gas emissions (GHG) by 2020. Although [Executive Order 13693](#) is mandatory only for domestic government operations, USAID will study and implement pilot programs at overseas missions that lead to the reduction of GHG emissions at Agency facilities to the extent practicable.

- a. In countries where USAID missions are co-located in U.S. embassy facilities on the compound, USAID partners with the Department of State, Overseas Buildings Operations Bureau (DOS/OBO), on sustainable initiatives and coordinates activities through OBO in the areas of Energy Management, Water and Wastewater management.
- b. In countries where USAID owns or has operational control of the facilities, USAID will initiate pilot programs to assess energy and utility consumption, and implement energy savings measures with the intent of reducing greenhouse gas emissions and furthering Agency-wide sustainability goals.

- c. USAID collaborates with DOS/OBO in addressing sustainability criteria in overseas construction projects and in complying with the MOU for Federal High Performance and Sustainable Buildings Guidance, to the extent practicable.
- d. USAID will review initiatives involving renewable or alternative energy sources and recycling/re-use, and implement such initiatives in collaboration with DOS/OBO where application is feasible.

528.3.6 Reporting Requirements

Effective Date: 05/14/2012

Federal agencies are required to report annually on energy and water management activities as mandated by the [National Energy Conservation Policy Act \(NECPA\)](#), the [Energy Policy Act of 2005 \(EPAct 2005\)](#), the [Energy Independence and Security Act of 2007 \(EISA\)](#), and [Executive Order 13423](#). The following energy management reports must be submitted:

a. Annual Report on Energy Usage

In countries where USAID missions are co-located in U.S. embassy facilities on the compound, the Post Facility Manager submits utility usage data to DOS/OBO per annual instructions issued by OBO. OBO will utilize the data to manage the Department's building portfolio, initiate and prioritize energy projects, communicate usage and usage trends, and document the overseas energy usage as it relates to the USAID's total carbon footprint.

USAID overseas missions that remain separate from Embassy compounds must submit utility usage reports to M/MS/OMD per annual instructions issued by USAID/W (M/MS). USAID will utilize the data to manage its building portfolio, initiate and prioritize energy projects, monitor usage and usage trends, and to track USAID's overseas GHG footprint.

b. Energy Management Initiatives Annual Report

M/MPBP/POL will coordinate the development and submission of the USAID Energy Management Initiatives Annual Report to OMB in conjunction with the annual greenhouse gas emissions report due by January 31 of each year.

528.3.7 Energy Management Training

Effective Date: 05/14/2012

M/MS will bring awareness and work with the USAID Senior Sustainability Officer to promote training opportunities in the latest building energy management requirements,

best practices, and energy management technologies in accordance with Section 157 of the Energy Policy Act of 1992 ([42 USC 8262c](#)). Up to date training opportunities that facilitate the implementation of sound, cost-effective energy management practices can be found on the Federal Energy Management Program ([FEMP](#)) Web site.

528.3.8 Exemption Authority and Waivers

Effective Date: 05/14/2012

AA/M adheres to the policy and procedures for submitting exemption authority requests and waivers outlined in the following external references:

- a. [10 CFR Part 436.108](#)
- b. [Executive Order 13693, Planning for Federal Sustainability in the Next Decade](#)
- c. [Executive Order 13423 - Section 8](#)
- d. [National Energy Conservation Policy Act \(NECPA\), Section 8253 \(b\)\(2\)](#)

528.4 MANDATORY REFERENCES

528.4.1 External Mandatory References

Effective Date: 05/14/2012

- a. [10 CFR Part 436](#)
- b. [Energy Independence and Security Act \(EISA\) 2007, Sections 431-441](#)
- c. [Energy Policy Act \(EPACT\) of 1992, Subtitle F](#)
- d. [Energy Policy Act \(EPAct\) of 2005, Sections 102 - 105; 203](#)
- e. [Executive Order 13423, Strengthening Federal Environmental, Energy, and Transportation Management](#)
- f. [Executive Order 13693, Planning for Federal Sustainability in the Next Decade](#)
- g. [Federal Acquisition Regulations \(FAR\), Subpart 23.2](#)
- h. [Federal Leadership in High Performance and Sustainable Buildings MOU](#)
- i. [Foreign Affairs Manual \(FAM\), 15 FAM 169](#)

j. [National Energy Conservation Policy Act \(NECPA\)](#)

528.4.2 Internal Mandatory References

Effective Date: 05/14/2012

- a. [ADS 517, Acquisition of Domestic Real Property Energy Management and Planning Programs for USAID Buildings](#)
- b. [ADS 535, Real Property Management Overseas](#)
- c. [DOS Bureau of Overseas Buildings Operations: Overseas Sustainability FY 10 – FY 20](#)

528.5 ADDITIONAL HELP

Effective Date: 05/14/2012

- a. **Asset Management Initiative – Real Property Cost Savings and Innovation Plan** [For a copy of this document, please contact Nora Lewis at NoLewis@usaid.gov.]
- b. [FedCenter](#)
- c. [Federal Energy Management Program \(FEMP\)](#)
- d. [USAID Agency Sustainability Plan](#)
- e. [Whole Building Design Guide](#)

528.6 DEFINITIONS

Effective Date: 05/14/2012

The terms and definitions listed below have been incorporated into the ADS Glossary. See the [ADS Glossary](#) for all ADS terms and definitions.

building energy system

An energy conservation measure or any portion of the structure of a building or any mechanical, electrical, or other functional system supporting the building, the nature or selection of which for a new building influences significantly the cost of energy consumed. (**Chapter 528**)

building water system

A water conservation measure or any portion of the structure of a building or any mechanical, electrical, or other functional system supporting the building, the nature or selection of which for a new building influences significantly the cost of water consumed. (**Chapter 528**)

energy conservation measures

Measures that are applied to an existing Federal building that improve energy efficiency and are life cycle cost effective. These measures generally involve energy conservation, cogeneration facilities, renewable energy sources, improvements in operation and maintenance efficiencies, or retrofit activities. (**Chapter 528**)

energy goal

The ratio of production achieved to energy used. (**Chapter 528**)

facility

Any structure or group of closely located structures, comprising a manufacturing plant, laboratory, office, or service center, plus equipment. (**Chapter 528**)

Federal building

Any individual building, structure, or part thereof, including the associated energy and water-consuming support systems, which is constructed, renovated, leased for over five years, or purchased in whole or in part for use by the Federal Government and which consumes energy or water. (**Chapter 528**)

goal

Specific statement of an intended energy conservation result which will occur within a prescribed time period. The intended result must be time-phased and must reflect expected energy use assuming planned conservation programs are implemented. (**Chapter 528**)

life cycle cost

The total cost of owning, operating, and maintaining a building over its useful life (including its fuel and water, energy, labor, and replacement components), determined on the basis of a systematic evaluation and comparison of alternative building systems. In the case of leased buildings, the life cycle must be calculated over the effective remaining term of the lease. (**Chapter 528**).

retrofit

Installation of a building system or building water system alternative in an existing Federal building. (**Chapter 528**)

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