

DOE Order 436.1A, *Departmental Sustainability*



U.S. DEPARTMENT OF
ENERGY



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I. Update Process (1 of 2)

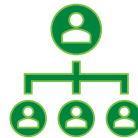
DOE Order 436.1 was published in 2011. The purpose of updating [DOE Order 436.1A](#) was:



Include new sustainability drivers and update sustainability planning processes.



Establish the DOE Sustainability Dashboard as platform for sustainability data submission.



Complete administrative changes to include the current organizational location of the function in the Office of Asset Management and updating the names of annual reports.

I. Update Process (2 of 2)



The Office of Sustainability and Asset Management (MA-50) updated the Order with an Integrated Project Team (IPT) consisting of members from:

- Office of the Chief Financial Officer
- Office of Energy Efficiency and Renewable Energy
- Office of Environment, Health, Safety and Security
- Office of Environmental Management
- Federal Energy Management Program
- Office of Fossil Energy and Carbon Management
- Office of the General Counsel
- Office of Legacy Management
- National Nuclear Security Administration
- Office of Nuclear Energy
- Office of Science

The draft Order went through two Department-wide reviews and two concurrence reviews via the Directives Review Board (DRB). All organizations concurred on the final Directive through the DRB.

II. Executive Intent



DOE Order 436.1A key elements:

- Provides a framework for the Department to use a life cycle cost effective, data-driven, risk-informed approach to meet sustainability and climate action requirements.
- Aligns sustainability performance planning, budgeting, and management with DOE missions.
- Emphasizes sustainability requirements and expected outcomes without dictating specifics as to how to perform sustainability practices.
- Incorporates existing sustainability laws and regulations.
- Leverages industry leading practices and voluntary consensus standards.
- **Includes no major policy changes.**

III. Purpose

The Order establishes an agency-wide integrated, performance-based approach to implement sustainability in DOE operations.

The Order ensures the Department conducts its missions in a sustainable manner that:



addresses national energy security and global environmental challenges;



advances sustainable, efficient, reliable, and resilient energy for the future;



promotes the conservation of natural resources; and



ensures DOE achieves sustainability goals pursuant to applicable laws, regulations, and Executive Orders.

III. Purpose

Includes requirements and responsibilities for the Department to:



Minimize or eliminate
emissions of
greenhouse gases and
other pollutants



Reduce energy and
water use



Increase adaptation
and resilience to
climate change



Protect public and
worker health



Minimize waste



Address anticipated
harm from emerging
contaminants



Conserve and restore
ecosystems and
preserve biodiversity



Deliver environmental
justice

IV. Requirements

- DOE Order 436.1A Requirements are defined in the following eight areas:
 - Planning, Budgeting and Funds Management
 - Acquisition and Supply Chain Management
 - Fleet Management
 - Environmental Stewardship, Waste Minimization, and Environmental Justice
 - **Facility, Energy, Water, and Utilities Management**
 - Climate Adaptation and Resilience
 - Land and Natural Resource Management
 - Performance Measurement and Reporting

4. Requirements

e. Facility, Energy, Water, and Utilities Management.

(1) Facility Site Selection, Design, and Construction.

DOE elements must:

(a) **Incorporate the principles of sustainability early in the project planning and design process** equivalent to Critical Decision 1 or earlier in accordance with DOE O 413.3, Program and Project Management for the Acquisition of Capital Assets, current version.

V. Impact on Real Property



4. e. (1) CONT

- (b) Incorporate **location-specific resilience** design criteria for new construction and major renovations.
- (c) Design new construction projects to meet the requirements of 10 Code of Federal Regulations (CFR) 433 including **achieving energy savings levels that are at least 30 percent below the latest ANSI/ASHRAE/IES Standard 90.1 baseline**, if life-cycle cost effective.
- (d) Design new construction, renovation, and modernization projects, **greater than 25,000 gross square feet, in accordance with the Guiding Principles for Sustainable Federal Buildings.**

V. Impact on Real Property



4. e. (1) CONT

(e) Design new construction and modernization projects, **greater than 25,000 gross square feet, to be net-zero emission by 2030.**

(g) Ensure the **sustainable and equitable siting** of new and leased facilities to promote local infrastructure, public transportation, and equitable economic development.

(i) Ensure lease space is in a building that at a minimum has earned an **Energy Star label**, or...negotiate a lease agreement that requires the owner...to **renovate the facility for all energy efficiency and conservation improvements** that would be cost effective over the life of the lease.

4. e. (2) Facility Operations and Maintenance. DOE elements must:
- (b) Evaluate existing facilities for **compliance with Guiding Principles for Sustainable Federal Buildings** as required and report in the Sustainability Dashboard.
 - (c) Ensure **covered metered facilities are benchmarked**, preferably using ENERGY STAR® Portfolio Manager.

4. e. (2) CONT

(d) Implement Federal Building Metering Guidance including:

1. meter all buildings for **electricity, water, natural gas, and steam** except for allowed exclusions; ensure **all meters are advanced meters** to the maximum extent practicable;
2. input metering data into the DOE Sustainability Dashboard;
3. ensure all advanced meter operations meet site and DOE cybersecurity standards; and
4. ensure compliance with DOE metering plan and relevant instructions.

V. Impact on Real Property



4. f. Carbon Pollution-Free Electricity and Renewable Energy.
DOE elements must:

(b) Leverage DOE real property **assets for onsite implementation of renewable energy and CFE systems**, including energy storage capacity.

VI. Responsibilities



The following personnel and organizations are responsible for ensuring the previously mentioned sustainability requirements are met:

- Deputy Secretary
- Chief Sustainability Officer
- Director, Office of Sustainability and Asset Management
- Under Secretaries and Administrators, Power Marketing Administrations
- Program Secretarial Officers
- Field Managers
- Director, Office of Environment, Safety, Health, and Security
- Federal Energy Management Program
- Chief Information Officer
- Chief Financial Officer
- Senior Procurement Executive
- Contracting Officers
- Sustainability Steering Committee
- Sustainability Working Group
- Office of General Counsel

VII. Summary

- DOE Order 436.1 was published in 2011. The purpose of updating [DOE Order 436.1A](#) was to include new sustainability drivers and processes.
- The Order update was completed by an IPT with representatives from across the Department.
- The Order went through two Departmental and two DRB reviews. All organizations concurred on the final Order through the DRB.
- The intent is to provide a framework for the Department to use a life cycle cost effective, data-driven, risk-informed approach to meet sustainability and climate action requirements.
- The Senior Leadership, Program Offices and Staff Offices are responsible for ensuring the defined sustainability requirements are met.

Please feel free to provide SPD with any additional feedback at sustainability@hq.doe.gov or give us a call at (202)-586-8645.