



The Department of Energy

Demonstrating Federal Leadership in Implementation of Executive Order 13423

GovEnergy Forum
August 7, 2007



President's Executive Order 13423;

January 2007

- 1. Improve energy efficiency and reduce greenhouse gas emissions by 30% by 2015**
- 2. Increase renewable energy consumption from new renewable sources and increase on-site renewable energy generation**
- 3. Reduce water consumption intensity (consumed gallons per square foot of building space) by 16% by 2015**
- 4. Use sustainable environmental practices, including acquisition of biobased, environmentally preferable, energy efficient, water efficient, and recycled-content products**
- 5. Reduce the quantity of toxic and hazardous chemicals and materials acquired, used or disposed of by the agency**
- 6. Ensure new construction and major renovations of agency buildings comply with the 2006 Federal Leadership in High Performance and Sustainable Buildings MOU**
- 7. Reduce fleet consumption of petroleum products 2% annually and increase non-petroleum based consumption 10% annually**
- 8. Electronic products should meet Electronic Product Environmental Assessment Tool (EPEAT) and Energy Star Requirements**



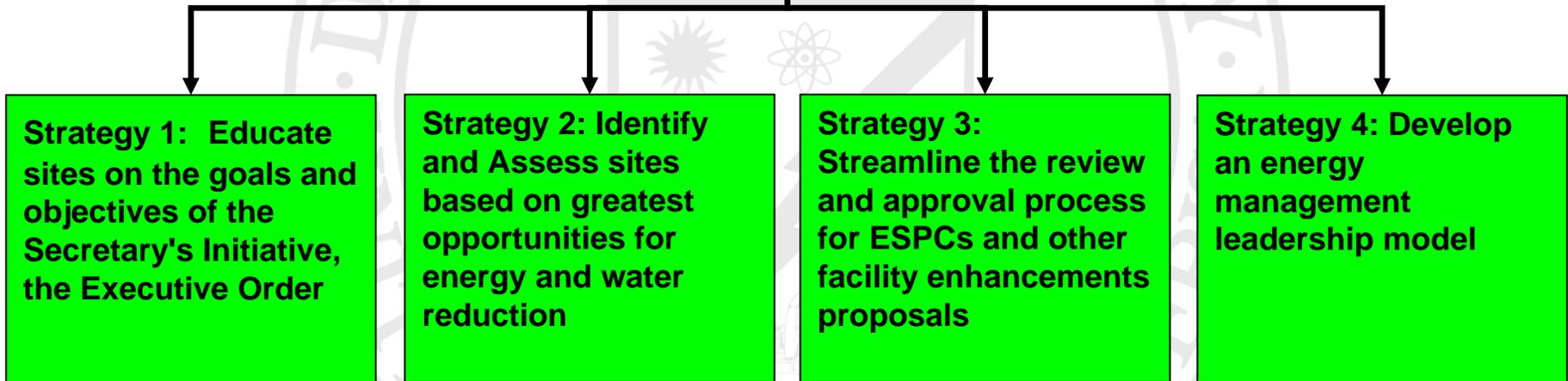
Each Agency will Establish New Authority and Responsibility for Compliance and be rated for performance

Executive Order 13432 requires that Agencies designate a “...senior civilian officer...to be responsible for implementation of this order within the agency.” (January 24, 2007)

The Secretary has designated that the Assistant Secretary, Energy Efficiency & Renewable Energy will assume lead responsibility and carry out implementation of Executive Order within DOE. (March 27, 2007)



EO Goal: Achieve 30% Energy and 16% Water reductions by 2015



Renewable Energy Generation and Use



EO Goal: Increase renewable energy consumption from new renewable sources and increase on-site renewable energy generation

Strategy 1: Develop life-cycle cost effective on-site projects while optimizing the use of private sector financing

Strategy 4: Minimize reliance on Renewable Energy Credit purchases

Strategy 2: Maximize direct purchases which facilitate new renewable energy projects

Strategy 5: Maximize use of DOE and other Federal land for new renewable energy projects

Strategy 3: Incorporate renewable technologies into new construction where feasible

Petroleum Reduction/Alternative Fuels



EO Goal: Reduce fleet consumption of petroleum products 2% annually and increase non-petroleum based consumption 10% annually

Strategy 1: Pursue low-cost options to immediately reduce petroleum consumption

Strategy 2: Maximize alternative fuel use through acquisition and distribution policies

Strategy 3: Expand alternative fueling infrastructure

Environmental Management Systems



EO Goal: Use Environmental Management Systems (EMS) as the management framework to implement, manage, measure, and continually improve upon, the sustainable environmental, energy, and transportation practices and goals of EO 13423.

Strategy 1: Establish requirements for achieving goals for toxic materials, waste diversion/ recycling, electronics stewardship and green acquisitions

Strategy 2: Incorporate sustainable environmental, energy, and transportation practices and goals into DOE Directives System

Strategy 3: Update DOE site EMSs to establish objectives targets for implementing the environmental, energy, and transportation goals

Strategy 4: Identify resources to implement EMS objectives in site budgetary processes or ESPCs

Sustainable Building Standards



EO Goal: *Ensure that (i) new construction and major renovation of agency buildings comply with the Guiding Principles and (ii) 15 percent of the existing capital asset building inventory as of the end of fiscal year 2015 incorporates the sustainable practices in the Guiding Principles;*

Five Guiding Principles for Federal Leadership in High Performance and Sustainable Buildings: 1) Employ Integrated Design Principles; 2) Optimize Energy Performance; 3) Protect and Conserve Water; 4) Enhance Indoor Environmental Quality; 5) Reduce Environmental Impact of Materials

Strategy 1: Line-Item construction projects (including major renovations) will incorporate the "Guiding Principles" to the maximum extent practicable.

Strategy 2: Minor Renovation projects will incorporate the "Guiding Principles" to the maximum extent practicable.

Strategy 3: Using the "Guiding Principles," baseline and benchmark the DOE Federal capital asset building inventory and establish a POA&M to achieve the 2015 goal.

DOE's Mission for Federal Energy Management

The Department of Energy's Federal Energy Management Program (FEMP)

- works to reduce the cost and environmental impact of the Federal government*
- advancing energy efficiency and water conservation*
- promoting the use of distributed and renewable energy*
- improving utility management decisions at Federal sites.*



Our most valuable tool - Private Sector financing

ESPCs – Energy Savings Performance Contracts

- Authorized via legislation in 1992
- Enables energy saving projects without appropriated funds

How They Work:

- Agency partners with an energy services company (ESCO) or Utility Energy Services Company (UESC)
- ESCO/UESC conducts survey of agency facility and proposes projects that will save energy costs
- When agency agrees, a contract is signed and work is performed
- ESCO/UESC is then paid for the work through the energy savings over the term of the contract



ESPCs (cont.)

- IDIQ contracts whereby ESCOs/UESCs are pre-approved for projects
- Designed and implemented in 1998 to streamline contracting process
- RFP for a New Super ESPC contract is forthcoming

Strengths

- ESPCs leverage private sector financing and expertise without need for appropriated funds
- Facilitates partnerships between Federal agencies and private partners

Challenges

- Centralized implementation structure
- More training and familiarity is needed across government
- Scope - Cannot be used for projects which do not directly provide energy cost savings (ex. alternative fuels, some environmental practices)