### **OVERVIEW**

OF

#### **EXECUTIVE ORDER 13514**

Federal Leadership in Environmental, Energy, and Economic Performance

> 10/27/2009 F&I Meeting

## President Obama Signing E.O. 13514

On October 5, 2009, President Obama Signed Executive Order 13514, Federal Leadership in Environmental, Energy, and Economic Performance.



#### **Executive Order 13514**

- Executive Order 13514 establishes numerous goals for Federal agencies.
- E.O. 13514 represents a transformative shift in the way the government operates by:
  - establishing GHGs as the integrating metric for tracking progress in Federal sustainability
  - requiring a deliberative planning process
  - linking to budget allocations and OMB scorecards to ensure goal achievement.
- E.O. 13423, Strengthening Federal Environmental, Energy, and Transportation Management (1/29/07) is not revoked by the new EO; its requirements remain in effect.

## E.O. 13514 Policy

The Federal Government shall lead by example in creating a clean energy economy. Federal agencies shall:

- Increase energy efficiency;
- Measure, report and reduce their GHG emissions;
- Conserve and protect water resources;
- Eliminate waste, recycle, and prevent pollution;
- Leverage agency acquisition to foster markets for sustainable technologies and environmentally preferable materials, products and services;
- Design, construct, maintain, and operate high performance sustainable buildings in sustainable locations;
- Strengthen the vitality and livability of communities in which Federal facilities are located; and
- Inform Federal employees about and involve them in achieving these goals.

#### Goals of E.O. 13514

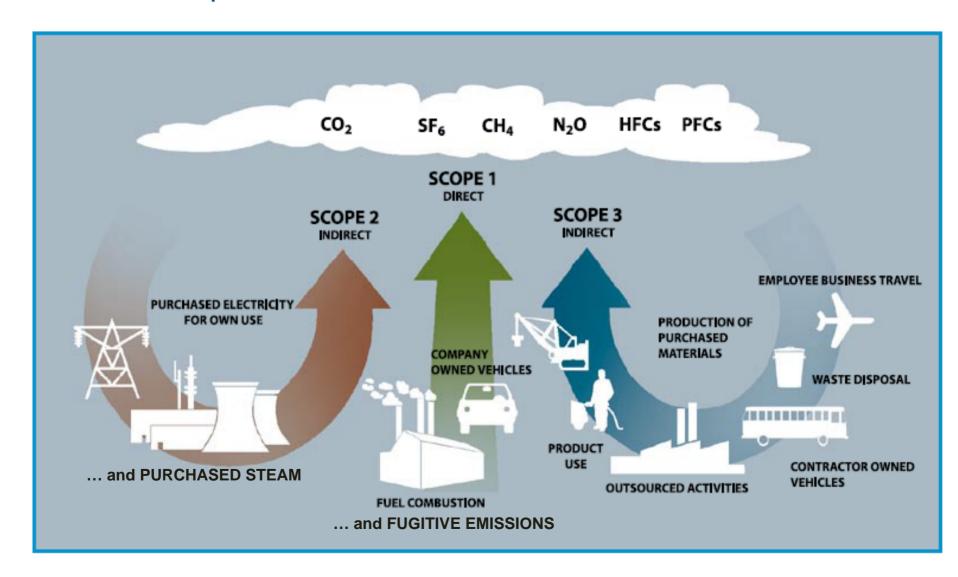
- Reduce GHG emissions\*
- 2. Improve water use efficiency and management\*
- 3. Promote pollution prevention and eliminate waste\*
- 4. Advance regional and local integrated planning
- 5. Implement high performance sustainable building design, construction, operation and management, maintenance, and deconstruction\*
- 6. Advance sustainable acquisition\*
- 7. Promote electronics stewardship
- 8. Sustain environmental management systems\*

<sup>\* =</sup> linked to facilities and infrastructure

### **GHG** Emissions

- SCOPE 1: Direct GHG emissions owned or controlled by Federal agency
  - Stationary External Combustion
  - Stationary Internal Combustion
  - Fleet Vehicles
  - Fugitive Emissions
- SCOPE 2: Direct GHG emissions from purchased utilities
  - Electricity
  - Heat
  - Steam
- SCOPE 3: Indirect GHG emissions
  - Employee commuting
  - Business travel
  - Waste
  - Production & transport of purchased material
  - Other

Compliance with EO 13514 means DOE will have to gather data on Scopes 1, 2 and 3 emissions from a number of sources.



## Reduce Potable Water Consumption

 E.O. 13514 extends the E.O. 13423 goal of reducing potable water consumption intensity by 2 percent annually, by requiring a <u>26 percent</u> <u>reduction by the end of FY 2020</u>, relative to baseline of FY 2007. This is to be accomplished, at least in part, by using water efficient and lowflow fixtures, and efficient cooling towers.

### Water Use: Reduce and Reuse

- E.O. 13514 establishes a new goal of reducing industrial, landscaping, and agricultural water consumption intensity by 2 percent annually or 20 percent by end of FY 2020, relative to baseline of FY 2010 for each use.
- E.O. 13514 requires DOE to identify, promote and implement water reuse strategies to reduce potable water consumption (consistent with State law).

## Water Management: Stormwater

- E.O. 13514 requires DOE to implement and achieve objectives identified in the EPA's Stormwater Guidance for Federal Facilities.
- The E.O. requires EPA to issue this guidance within 60 days of the issuance of the Order.

### Waste Diversion

- Minimize the generation of waste and pollutants through source reduction.
- Divert from disposal at least 50 percent of non-hazardous solid waste, excluding construction and demolition debris, by FY 2015.
- Divert from disposal at least 50 percent of construction and demolition debris by FY 2015.
- Increase the quantity of compostable and organic material diverted from waste stream.
- Reduce printing paper use.

### Waste Reduction: Chemicals

- Minimize the quantity of toxic and hazardous chemicals and materials acquired, used, and disposed of.
- Implement integrated pest management and other landscape management practices.
- Increase use of alternative chemicals and processes.
- Decrease the use of chemicals where this will assist DOE in achieving GHG emission reduction targets.

# High Performance Sustainable Building

- Design all new Federal buildings which begin the planning process by 2020 to achieve zero-net energy by 2030.
- E.O. 13514 extends E.O. 13423 goal of ensuring 15 percent of the agency's existing facilities and leases meet the *Guiding Principles* by FY 2015 by requiring agencies to continue to make annual progress towards 100 percent agency conformance.
- Minimize consumption of energy, water and materials by pursuing cost-effective, innovative strategies such as highly reflective and vegetated roofs.

# Buildings: Portfolio Management

- Reduce deferred maintenance costs of existing assets by better managing existing building systems that impact consumption of energy, water, and materials and by identifying alternatives to renovation.
- Identify opportunities to consolidate and dispose of existing assets, optimize performance of agency real property portfolio, and reduce associated environmental impacts.
- Promote long-term viability of Federally-owned historic buildings by ensuring that rehabilitation utilizes best practices and technologies in retrofitting.

# Sustainable Acquisition

Ensure that <u>95 percent of all new contract</u> actions (including task and delivery orders) for products and services are:

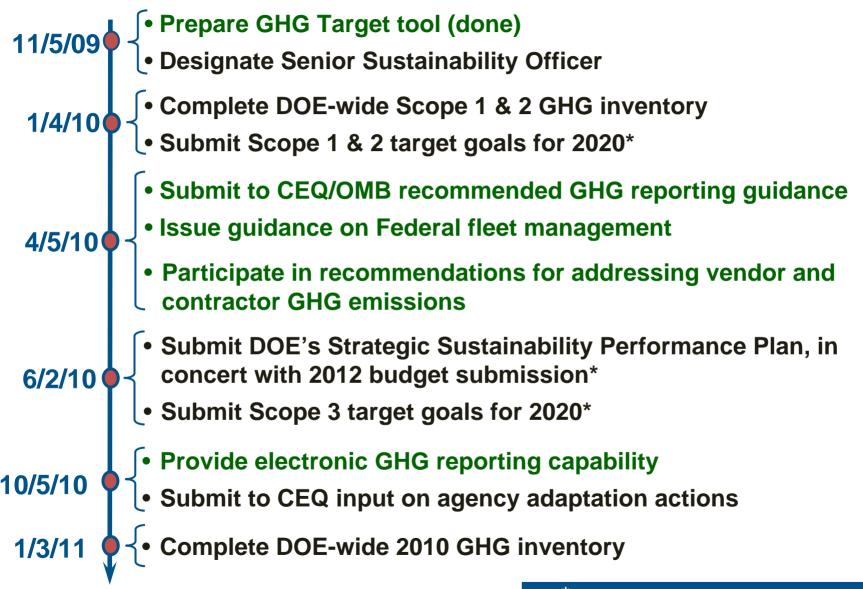
- energy efficient,
- water-efficient,
- biobased,
- environmentally preferable,
- non-ozone depleting,
- contain recycled content, or are
- non-toxic or less-toxic than traditional alternatives,

where such products and services meet DOE performance requirements.

# **Environmental Management Systems**

- E.O. 13514 explicitly requires that DOE sustain EMSs, including:
- Continuing implementation of formal environmental management systems at all appropriate organizational levels, and
- Ensuring that these formal systems are appropriately implemented and maintained to achieve the performance necessary to meet the goals of this order.

#### **NEAR-TERM DEADLINES**



### Strategic Sustainability Performance Plan

#### By June 2, 2010, Submit the SSP Plan that shall:

- Demonstrate how DOE will achieve the goals and targets in Section 2 of the E.O., including agency GHG reduction targets;
- Be integrated into DOE's strategic planning and budget process;
- Identify DOE activities, policies, plans, procedures and practices that are relevant to implementation of the E.O., and develop new ones where necessary;
- Identify specific goals, a schedule, milestones, and approaches for achieving results; and quantifiable metrics for DOE implementation of the E.O.
- Incorporate actions for achieving progress metrics identified by OMB and CEQ

#### The SSP Plan shall (cont.):

- Take into consideration environmental measures as well as economic and social benefits and costs in evaluating projects and activities based on lifecycle return on investment;
- Outline planned actions to make available information about DOE progress and performance on a public website;
- Evaluate climate change risks and vulnerabilities to managing the effects on DOE operations and missions;
- Take into consideration environmental measures as well as economic and social benefits and costs in evaluating projects and activities based on lifecycle return on investment;
- Identify opportunities for improvement in annual updates.

### **Next Steps**

- DOE faces several challenging near-term deadlines:
  - Preparing GHG inventories
  - Establishing GHG reduction targets
  - Developing a Strategic Sustainability
    Performance (SSP) Plan
- DOE must integrate budget and implementation of SSP Plan
- Our longer-term challenge will be to meet our GHG reduction targets and other goals.

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