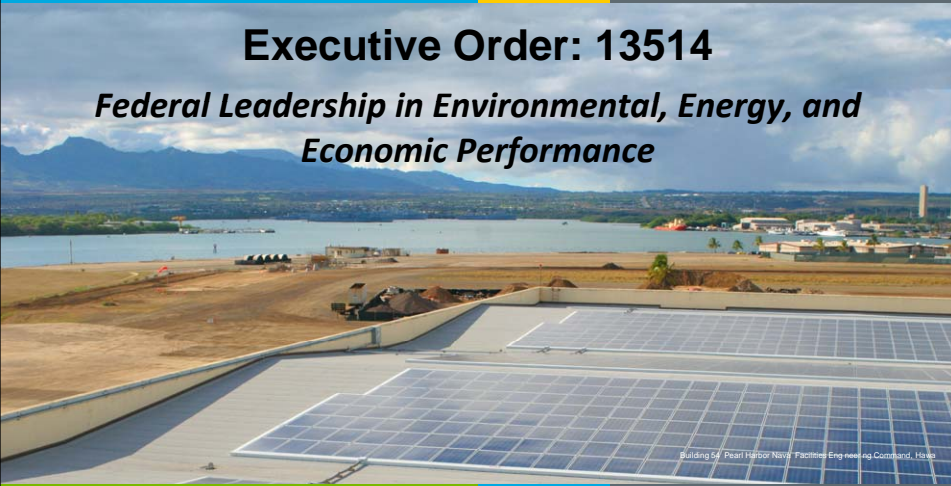


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U.S. DEPARTMENT OF  
**ENERGY** | Energy Efficiency &  
Renewable Energy

**Executive Order: 13514**  
*Federal Leadership in Environmental, Energy, and  
Economic Performance*



Building 54, Pearl Harbor Naval Facilities Engineering Command, HI 983

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**Objectives**

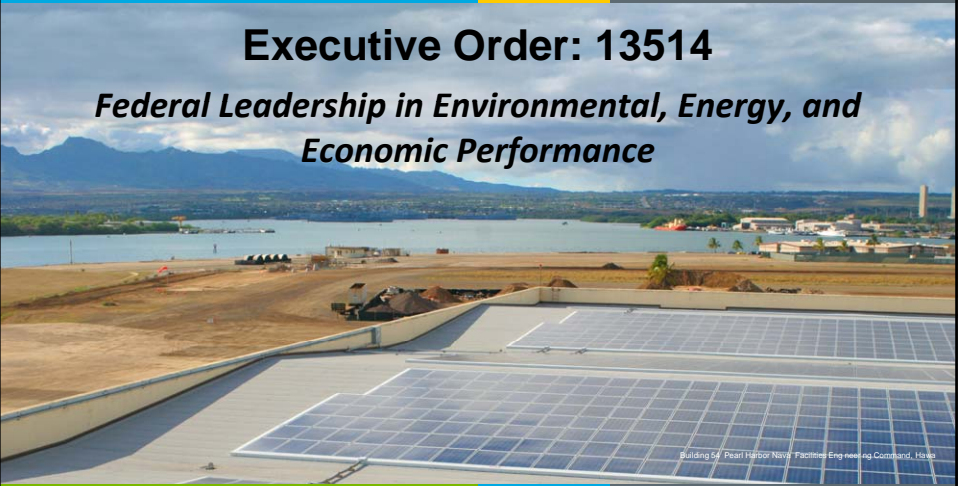
1. Understand the goal areas as outlined in EO 13514;
2. Give an explanation of the purpose and national benefits of EO 13514;
3. Begin the discussion process to meet the goals of EO 13514; and,
4. Share your learning with other decision makers within your facility and agency

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**Introduction to Executive Order 13514**

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**President Obama**

“As the largest consumer of energy in the U.S. economy, the Federal government can and should lead by example when it comes to creating innovative ways to reduce greenhouse gas emissions, increase energy efficiency, conserve water, reduce waste, and use environmentally-responsible products and technologies.”

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## President Obama



"This Executive Order builds on the momentum of the Recovery Act to help create a clean energy economy and demonstrates the Federal government's commitment, over and above what is already being done, to reducing emissions and saving money."

President Barack Obama participates in the CEQ Executive Order signing in the Oval Office, Oct. 5, 2009. (Official White House Photo by Pete Souza)

## Message

- Lead by example
- Take pride in agency accomplishments
- Think "integrated planning"
- Reach across "stovepipes"
- Coordination and collaboration are essential

## Purpose of Executive Order 13514

The Federal government:

- occupies nearly 500,000 buildings,
- operates more than 600,000 vehicles,
- employs more than 1.8 million civilians,
- and purchases more than \$500 billion per year in goods and services.



## Purpose of Executive Order 13514

The Executive Order builds on and expands the energy reduction and environmental requirements of Executive Order 13423 by making reductions of greenhouse gas emissions a priority of the Federal government, and by requiring agencies to develop sustainability plans focused on cost-effective projects and programs.

## Benefits to the Nation

Projected benefits:

- Energy savings
- Avoided costs
- Jobs
- Innovations
- Improvements to local infrastructure



## Policy

- Establish an integrated agency strategy for sustainability, including reducing greenhouse gas emissions, within the federal government in order to lead by example and achieve a clean energy economy.

## Overview of Executive Order 13514

The new Executive Order requires agencies to measure, manage, and reduce greenhouse gas emissions toward agency-defined targets. It describes a process by which agency reductions targets will be set and reported to the President by the Chair of CEQ.

## Goal Areas in 13514

- Greenhouse gas emissions reduction targets
- Energy efficiency
- Water use efficiency and management
- Pollution prevention and waste elimination
- Regional and local integrated planning

## Goal Areas in 13514 (cont)

- High performance sustainable Federal buildings
- Sustainable acquisition
- Electronics stewardship
- Environmental management Systems



## GHG Emissions

Scope 1: Direct GHG emissions from sources owned or controlled by Federal agencies.

Scope 2: Direct GHG emissions from consumption of purchased electricity, heat or steam.

Scope 3: Other indirect emissions from sources not owned or directly controlled by a Federal agency [e.g., emissions from employee travel and commuting, electricity transmission and distribution (T&D) not covered in Scope 2, waste disposal, wastewater treatment, etc.]

## Report and reduce greenhouse gas emissions

- Agencies establish an absolute percentage reduction target for FY 2020, relative to FY 2008:
  - **Scope 1 and 2:** by January 4, 2010
  - **Scope 3:** by June 2, 2010

## Report and reduce greenhouse gas emissions (cont)

- Agencies develop and maintain a comprehensive inventory of Scope 1, 2, and 3 emissions starting in FY 2010
  - First submission due January 5, 2011



## Scope 1 and 2 Target January 4, 2010

- Agencies shall consider reductions from:
  - Reducing energy intensity in agency buildings
  - Increasing agency use of renewable energy
  - Implementing renewable energy generation projects
  - Reducing the use of fossil fuels
    - Using low GHG emitting vehicles
    - Optimizing the number of vehicles in fleet
    - Reducing vehicle petroleum use by 2% annually
      - "Note: 2% annually through the end of FY 2020, relative to FY 2005 baseline -- applies only to agencies with 20 or more vehicles."

## Scope 3 Target June 2, 2010

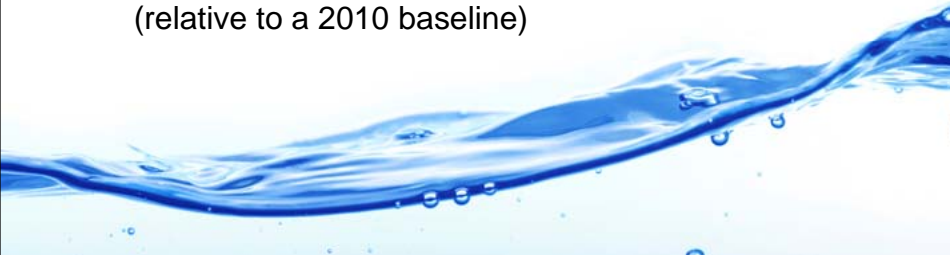
- Agencies shall consider reducing GHG emissions by:
  - Pursuing opportunities with vendors and contractors to reduce GHG emissions
  - Implementing low-carbon strategies for acquisition, transit, travel, and conferencing
  - Developing and pursuing other innovative policies and practices

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## Improve water use efficiency and management

- Achieve 2% annual reduction in:
  - Potable water intensity by FY 2020 or 26% total reduction (relative to FY 2007 baseline)
  - Industrial, landscaping, and agricultural water consumption by FY 2020 or 20% total reduction (relative to a 2010 baseline)



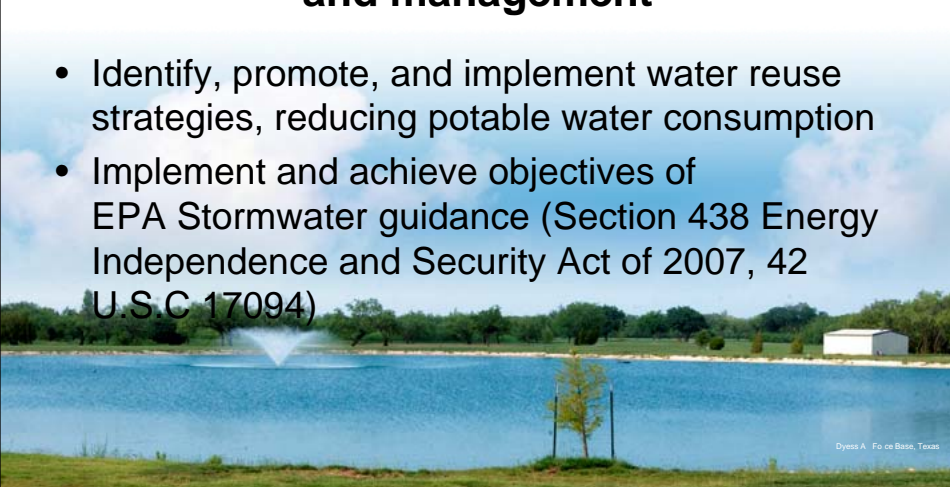
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## Improve water use efficiency and management

- Identify, promote, and implement water reuse strategies, reducing potable water consumption
- Implement and achieve objectives of EPA Stormwater guidance (Section 438 Energy Independence and Security Act of 2007, 42 U.S.C 17094)



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## Promote pollution prevention and eliminate waste

- Minimize waste and pollutant generation through source reduction
- By FY 2015, achieve a 50% or higher
  - Solid waste diversion
  - Construction and demolition diversion
- Reduce acquisition, use, and disposal of toxic and hazardous materials and chemicals

## Promote pollution prevention and eliminate waste


- Reduce paper use and use 30% post-consumer recycled paper
- Increase organic and compostable materials diverted from waste stream
- Implement integrated pest management and other landscape management practices

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## Promote pollution prevention and eliminate waste

- Increase use of alternative chemicals and processes
- Report according to Emergency Planning and Right-to-Know Act



Headquarters and Visitor Center at the Massachusetts National Wildlife Refuge (Wareham, VT)

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## Advance regional and local integrated planning

- Participate in regional transportation planning and recognize existing community infrastructure
- Align federal policies to increase effectiveness of local planning for energy choices
- Ensure planning of new facilities and leases is transit-oriented and emphasizes existing or planned town centers

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## Advance regional and local integrated planning

- Identify and analyze impacts from energy usage and alternatives in all EISs and EAs for proposed or new or expanded facilities
- Coordinate with regional programs for all levels of ecosystem, watershed, and environmental management programs

## Implement sustainable Federal buildings

- Ensure that all new buildings that begin the planning process in 2020 or after are designed to achieve zero-net-energy by 2030
- Ensure that all new agency construction and renovation complies with the “Guiding Principles” (Guiding Principles for Federal Leadership in High Performance and Sustainable Buildings)

## Implement sustainable Federal buildings

- Ensure that 15% of existing federal building inventory of the agency (existing and leased) meet the Guiding Principles by FY 2015 and continue toward 100% compliance for all building inventory
- Encourage cost-effective, innovative strategies (cool roofs and green roofs) to reduce energy, water, and material use

## Implement sustainable Federal buildings

- Identify opportunities to dispose and consolidate unused property assets
- Ensure retrofitting and renovation of Federally-owned historic properties promotes long-term viability.



Photovoltaics sit on the "cool roof" of the Environmental Protection Agency's Research Triangle Park facility.

## Advance sustainable acquisition

- Ensure that 95% of all new contracts and contract modifications for products and services are:
  - Energy efficient
  - Water-efficient
  - Biobased
  - Environmentally preferable
  - Non-ozone depleting
  - Contain recycled content
  - Non-toxic or less toxic alternatives

\*excludes weapons systems

## Promote electronics stewardship

- Ensure EPEAT-registered electronic product procurement preference
- Ensure procurement of Energy Star and FEMP designated equipment



## Promote electronics stewardship

- Establish and implement policies to enable power management, duplex printing, and other energy efficient or environmentally preferable features
- Use environmentally sound disposable practices for electronics
- Implement best practices in energy efficient management of service data centers

## Sustain environmental management

- Continue implementation of existing environmental management systems to achieve performance necessary to meet goals of this Order





## Agency Sustainability Plans

Implementation of the Executive Order will focus on integrating achievement of sustainability goals with agency mission and strategic planning to optimize performance and minimize implementation costs.

## Agency Sustainability Plans

Each agency will develop integrated Strategic Sustainability Performance Plan that prioritizes the agency's actions toward the goals of the Executive Order based on lifecycle return on investments.

Implementation will be managed through the previously-established Office of the Federal Environmental Executive, working in close partnership with OMB, CEQ and the agencies.

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## Agency Timeline

What's Due	When
Agency Specific Scope 1 and 2 Target	1/4/2010
Agency Strategic Sustainability Performance Plan <u>and</u> Scope 3 Target	6/2/2010
Greenhouse Gas Inventory	1/5/2011

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## Next Steps – FEMP Training

- Development of Scope 3 targets
- Development of Sustainability Plans
- Ensure appropriate internal coordination within agencies (environmental, real property, energy, budget, etc.)
- Review internal agency policy and guidance to determine needs for revision
- Where possible, synchronize existing efforts
- Learn from other agencies (interagency working groups, etc.)

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### Additional Responsibilities

Lead Agency	Section	Title	Due Date
DOE	9	Greenhouse Gas Accounting and Reporting	180 days ; 1yr Dates: 4/5/2010 ; 10/5/2010
DOT	10	Sustainable Locations for Federal Facilities	180 days Date: 4/5/2010
GSA	11	Federal Local Transportation Logistics	180 days Date: 4/5/2010
DOE	12	Federal Fleet Management Guidance	180 days Date: 4/5/2010
GSA	13	Vendor and Contractor Emissions Guidance	180 days Date: 4/5/2010
EPA	14	Stormwater Guidance for Federal Facilities	60 days Date: 12/4/2009

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### Additional Responsibilities

Lead Agency	Section	Title	Coordinating agencies
DOE	9	Greenhouse Gas Accounting and Reporting Recommendations	EPA, DoD, GSA, DOI, DOC (NOAA)
DOT	10	Sustainable Locations for Federal Facilities Recommendations	EPA, HUD, GSA, DHS, DoD,
GSA	11	Federal Local Transportation Logistics Recommendations	GSA, DOT, DOTr, DOE, OPM
DOE	12	Federal Fleet Management Guidance	GSA
GSA	13	Vendor and Contractor Emissions Guidance	DoD, EPA
EPA	14	Federal Facility Stormwater Guidance	Existing interagency group

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## FEMP Training Participant Action Steps

- Begin studying how new EO effects your areas of responsibility
- Where can your agency make a difference?
- Communicate with working partners about changes needed
- How do current efforts contribute to meeting goals (leverage efforts and investments)?
- Communicate with those involved in agency planning and budget

## Points of Contact at OFEE

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