



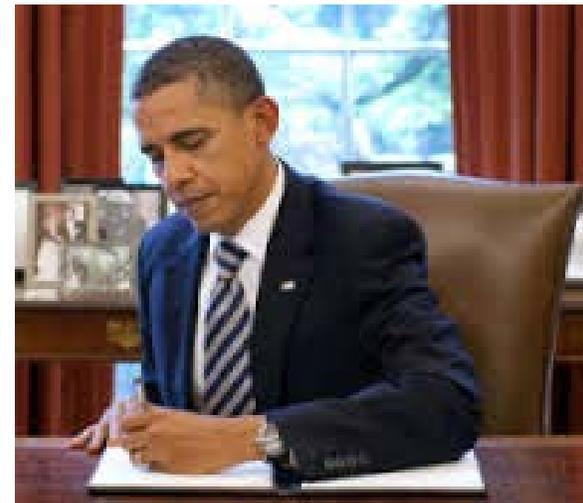
Sustainability in the Federal Government

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CERTIFICATE IN RESPONSIBLE MANAGEMENT PRESENTATION

E.O. 13693 PLANNING FOR FEDERAL SUSTAINABILITY IN THE NEXT DECADE

- On March 19, 2015 President Obama signed Executive Order (EO) 13693, Planning for Federal Sustainability in the Next Decade.
- Building on momentum of previous EOs and Presidential Memoranda, it sets ambitious sustainability mandates.
- Overarching goal of reducing greenhouse gas (GHG) emissions by at least 40 percent across federal operations and the federal supply chain.



E.O. 13693

SUSTAINABILITY MANDATES



Greenhouse Gases	Establish FY 2025 percentage reduction targets relative to a FY 2008 baseline
Energy	Reduce building energy intensity by 2.5% annually through FY 2025 relative to a FY 2015 baseline
Renewable Energy	Obtain 30% of building electricity from renewables by 2025
Sustainable Buildings	Identify a percentage of existing buildings to be energy, waste, or water net-zero buildings by FY 2025
Water	Install water meters to collect real-time data to facilitate conservation
Performance-Based Contracts	Establish annual targets for FY 2017 and beyond
Electronics Stewardship	Establish a power usage effectiveness target of 1.2 to 1.4 for new data centers and less than 1.5 for existing data centers
Fleet Management	Ensure 20% of new passenger vehicles are zero-emission by 2020; 50% by 2025
Sustainable Acquisitions	Purchase sustainable products and services such as those designated as WaterSense, Safer Choice, or Smartway
Pollution Prevention	Divert at least 50% of non-hazardous solid waste annually and pursue net-zero waste opportunities
Climate Change Resilience	Consider climate impacts in operational preparedness planning for major facilities and operations

Key Facts & Messages

- Buildings are responsible for 43% of GHG emissions from Federal government operations.
- The Federal government has more than 365,000 buildings and structures in its portfolio.
- Greening building is a key part of Federal efforts to reduce GHG emissions, conserve energy and water, protect the environment, support employee health and wellness, and address climate risks.
- Better buildings reduce total operating costs.



Guiding Principles Background

- The Guiding Principles for new construction and modernization apply to all new Federally owned buildings over 5,000 square feet.
- The Guiding Principles for existing buildings should be adopted for agencies' existing portfolio of Federally owned buildings over 5,000 square feet.
- Agencies must meet the Guiding Principles on at least 15% of these existing buildings no later than FY 2025.
- Once an agency achieves 15% compliance, it should set annual targets and continue to strive to apply the guiding principles to 100% of its building inventory.
- Leases will no longer be included in calculating compliance with the Guiding Principles.



6 Guiding Principles: Existing Buildings and New Construction or Modernization

1. Employ Integrated Design
2. Optimize Energy Performance
3. Protect and Conserve Water
4. Enhance Indoor Environmental Quality
5. Reduce Environmental Impacts of Materials
6. Assess and Consider Climate Change Risks

Existing: 12 out of 18 metrics are required – 8 that are specific plus 4 additional

New Construction: metrics 1-20 are required

Modernization: metrics 1-18 and 21 are required

Guiding Principle #2: Optimize Energy Performance for Existing Buildings

GP II: Optimize Energy Performance		
Guiding Principle	Type	Full Text
03. Energy Efficiency	Existing Buildings	<p>A) Ensure:</p> <p>1. The building has an ENERGY STAR rating of 75 or higher, or Energy use is 20% below the FY 2015 energy use baseline, or Energy use is 30% below the FY energy use baseline, or Energy efficiency is 30% better than the current ASHRAE 90.1 standard, and</p> <p>B) Use energy-efficient products, as required by statute. [Required]</p>
04. Renewable and Clean Energy	Existing Buildings	Evaluate and implement, where appropriate, life cycle cost-effective renewable energy projects on-site; consider long term.
05. Metering	Existing Buildings	Install building level meters for electricity, natural gas, and steam; install advanced or standard meters as appropriate.
06. Benchmarking	Existing Buildings	Compare building performance with energy performance benchmarks at least annually, preferably using ENERGY STAR Portfolio Manager; regularly monitor building energy performance against historic performance data and peer buildings.

Guiding Principle #2: Optimize Energy Performance for New Construction or Modernization

Guiding Principle	Type	Full Text
03. Energy Efficiency	New Construction or Modernization	<p>A. For new construction, ensure energy efficiency is 30% better than the current American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) 90.1 standard, or</p> <p>B. For modernization, ensure:</p> <ul style="list-style-type: none"> i. Energy use is 20% below the fiscal year (FY) 2015 energy use baseline, or ii. Energy use is 30% below the FY 2003 energy use baseline, or iii. The building has an ENERGY STAR rating of 75 or higher, or iv. For building types not in ENERGY STAR Portfolio Manager, where adequate benchmarking data exists, the building is in the top quartile of energy performance for its building type, and <p>C. For new construction and modernization, use energy efficient products, as required by statute. [Required]</p>
04. Renewable and Clean Energy	New Construction or Modernization	Evaluate and implement, where appropriate, life cycle cost-effective renewable energy projects on-site; consider long-term off-site renewable sources and renewable energy certificates (RECs); and utilize clean and alternative energy where possible. [Required]
05. Metering	New Construction or Modernization	Install building-level meters for electricity, natural gas, and steam; install advanced or standard meters as appropriate. [Required]
06. Benchmarking	New Construction or Modernization	Benchmark building performance at least annually, preferably using ENERGY STAR Portfolio Manager; regularly monitor building energy performance against historic performance data and peer buildings. [Required]

Guiding Principles Compliance Measurements

- Used by the Office of Management and Budget to score federal agencies' progress and compliance within the "Green Buildings" category on annual agency scorecards.
- Each agency is responsible for evaluating its buildings for compliance with the Guiding Principles (i.e. ENERGY STAR Portfolio Manager).
 - [Sustainable Buildings Checklist](#)
- Agencies can use Portfolio Manager to upload compliance documents, create portfolio-wide federal building sustainability roll-up reports, review up-to-date energy and water metrics, etc.
- CEQ and EPA are working to modify ENERGY STAR Portfolio Manager to accommodate 2016 Guiding Principles.



Thank You

