

31 Jan 08

Topic	EPAct 05 Requirement	EO 13423	EISA07
Energy management goals	<p>102. Energy management goals Annual energy reduction goal of 2% from FY 2006 - FY 2015</p> <p>Reporting baseline changed from 1985 to 2003</p>	<p>Sec. 2(a) - Compared to 2003 baseline – Reduce 3% annually by end of 2015; or 30% reduction by end of fiscal year 2015</p>	<p>431- Energy Reduction Goals for Federal Buildings - accelerates targets for energy use reductions in federal buildings to 3% per year for FY08-FY15, ending in a 30% reduction in energy intensity by 2015, consistent with Executive Order 13423</p> <p>527- Government Efficiency Status Reports - Starts an annual "government efficiency status report", by each agency head, on progress toward Title V actions, including sections on ESPC, solar hot water heaters, and procurement of appliances with standby power, energy efficient products and alternate fuels</p>
Management of Energy and Water Efficiency in Federal Buildings, Energy and Water Audits	<p>Not Addressed</p>	<p>Not Addressed</p>	<p>Title IV, Subtitle C - High Performance Federal Buildings - calls for increased energy and water efficiency in federal buildings. "Facility" defined to include owned, operated and leased by the federal government. - Each Federal agency shall designate an energy manager responsible for implementing Title IV and reducing energy use at each facility that meets specified criteria. - DoE to develop criteria and guidelines, after consulting with agencies, that covers at least 75% of energy use at that agency</p> <p>432- Management of Energy and Water Efficiency in Federal Buildings - requires that for large buildings, agencies must designate an energy manager - do energy and water evaluations for approximately 25% of facilities of each agency annually, so all appropriate facilities have been evaluated in a 4 year cycle (Effective beginning 180 days after enactment. Calendar year rather than fiscal year) - Allows appropriations and private financing to be combined to fund these activities</p>
Energy use measurement and accounting	<p>103. Energy use measurement and accounting Electric metering required in federal buildings by 1 Oct 2012</p>	<p>Not Addressed</p>	<p>434- Management of Federal Building Efficiency - requires large capital energy investments in federal facilities to be the most energy-efficient that is cost-effective (includes renovations smaller than "major") - requires each agency to develop a process for reviewing each decision made on large capital energy investments to ensure requirements are met (To be completed within 180 days of enactment. Report on process to OMB.) - requires agencies to meter natural gas and steam, as well as electricity</p>
Water Conservation	<p>109. Water conservation technologies included where Life-Cycle Cost Effective;</p>	<p>2 c Beginning FY 08, reduce water consumption intensity, relative to the 2007 baseline by 2% annually through the end of fiscal year 2015</p>	<p>Not Addressed</p>
Procurement of Energy Efficient Products		<p>2(d) - Use of sustainable environmental practices, including acquisition when practicable of biobased energy, environmentally preferable, and energy-efficient, water-efficient and recycled-content products, & use of paper of at least 30 percent post-consumer fiber content; 2 (h) Electronic products - ensure that the agency when acquiring an electronic product to meet its requirements, meets at least 95% of those requirements with an Electronic Product Environmental Assessment Tool (EPEAT)-registered electronic product, unless there is no EPEAT standard for such product, enables the Energy Star feature on agency computers and monitors, establishes and implements policies to extend the useful life of agency electronic equipment, & uses environmentally sound practices with respect to disposition of agency electronic equipment that has reached the end of its useful life.</p>	<p>323 - Public Building Energy Efficient and Renewable Energy Systems - Requires use of energy efficient lighting in public buildings ("Public Building" is defined in 40 USC, Chapter 33. Does not include what is on military installations, but does include federal office buildings (REO's, USACE districts, etc. Public Buildings are those acquired by GSA) 524- Federally-Procured Appliances with Standby Power - requires agencies to buy products that use 1 watt or less of standby power 525- Federal Procurement of Energy Efficient Products - Requires GSA and DLA to list only Energy Star or FEMP designated products in their catalogues</p>

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<p>Energy Savings Performance Contracts (ESPC)</p>	<p>105. ESPCs Reauthorizes ESPCs through September 30, 2016</p>	<p>Not Addressed</p>	<p>511- Authority to Enter into Contracts; Reports - eliminates the written notification of contract congressional notification requirement; 512- Financing Flexibility - allows agencies to use any combination of appropriated funds and private financing for ESPCs; 513- Promoting Long - Term Energy Savings Performance Contracts and Verifying Savings - clarifies allowed length of contracts under Super-ESPCs, and bars agencies from capping the allowable term of ESPCs to less than the 25-year legal limit, or the total obligations under ESPCs; 514- Permanent ESPC Reauthorization - permanently extends authority to enter into ESPCs; 515- Definition of Energy Savings - clarifies that cogeneration, sales of energy from on-site renewable generation or cogeneration, and water savings can be included in ESPCs 516- Retention of Savings - Retention of savings no longer limited to 50% of realized cost savings 517- Training Federal Contracting Officers to Negotiate Energy Efficiency Contracts - Directs FEMP to create and administer a training program for ESPC contracting personnel 518- Study of Energy and Cost Savings in Non-Building Applications - Directs DoE and DoD to study non-building ESPC applications</p>
<p>Federal Building Performance Standards</p>	<p>109. All new buildings to be designed to be at least 30% more efficient than current ASHRAE or IEEC standards; <ul style="list-style-type: none"> • Sustainable building principles to be applied to all new and replacement buildings – siting, design, and construction; • Water conservation technologies included where Life-Cycle Cost Effective; • Agencies include in budget a list of new buildings and compliance certification </p>	<p>2 (f) Ensure that new construction and major renovation of agency buildings comply with the <i>Guiding Principles for Federal Leadership in High Performance and Sustainable Buildings</i> set forth in the <i>Federal Leadership in High Performance and Sustainable Buildings Memorandum of Understanding (2006)</i> , & 15% of the existing Federal capital asset building inventory of the agency as of the end of fiscal year 2015 incorporates the sustainable practices in the Guiding Principles.</p>	<p>306 - Regional Standards for Furnaces, Central Air Conditioners, and Heat Pumps - DoE can consider geographic regions when establishing energy efficiency standards for furnaces (not boilers), central air conditioners and heat pumps (may affect large scale equipment purchases with different products provided for different regions) 433- Federal Building Energy Efficiency Performance Standards - requires new federal buildings and major renovations to reduce fossil fuel-generated energy consumption, as compared to 2003 baseline, by 55% in 2010, and rising to 100% by 2030, - Agencies employing an internal certification process must obtain certification by an external certification entity for at least 5% of buildings certified each year - Privatized military housing to be included in SDD criteria or alternative criteria 435- Leasing - requires agencies to lease space in buildings that have earned the Energy Star label in the previous year, 436 - High-Performance Green Federal Buildings - Establishes in GSA an Office of Federal High Performance Green Buildings to coordinate SDD activities amongst agencies 438- Storm Water Runoff Requirements for Federal Development Projects - requires that any development or redevelopment project involving a Federal facility with a footprint that exceeds 5,000 square feet shall use site planning, design, construction, and maintenance strategies for the property to maintain or restore, to the maximum extent technically feasible, the predevelopment hydrology of the property with regard to the temperature, rate, volume, and duration of flow (no effective date nor assignment for rule development, so could be considered immediately effective and to be incorporated in BRAC construction projects) 441 - Public Building Life-Cycle Costs - Extends the period for Life Cycle Cost accounting from 25 years to 40 years</p>

EPAct 05, E.O. 13123, E.O. 13423 EISA 07 Summary /Crosswalk
31 Jan 08

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Renewable Energy	<p>203. Federal purchase requirement (renewables) Renewable electricity consumption by the Federal Government can not be less than:</p> <p>3 % in FY07-09 5 % in FY 10-12 7.5 %in 2013 +</p>	<p>2 (b) At least 50%of the renewable energy consumed by the agency in a fiscal year comes from new renewable sources, & to the extent feasible, the agency implements renewable energy generation projects on agency property for agency use</p>	<p>523- <i>Standard Relating to Solar Hot Water Heaters</i> - at least 30% of hot water demand in new or substantially modified federal buildings be met using solar hot water heaters, 806- <i>Sense of Congress Relating to the use of Renewable Resources to Generate Energy</i> - expresses the sense of Congress that domestic renewable sources of energy should provide 25% of energy consumed in the U.S. by 2025</p>
Vehicle Fleet	Not Addressed	<p>2 (g) Ensure that, if the agency operates a fleet of at least 20 motor vehicles:</p> <ul style="list-style-type: none"> - the agency, relative to agency baselines for fiscal year 2005 reduces the fleet's total consumption of petroleum products by 2% annually through the end of fiscal year 2015; - Increases the proportion of the fleet's total fuel consumption that is non-petroleum-based fuel by 10% annually until 100% of the fleet is fueled by such fuel, & uses plug-in hybrid (PIH) vehicles to meet vehicle requirements when PIH vehicles are commercially available at a cost reasonably comparable, on the basis of life-cycle cost, to non-PIH vehicles. 	<p>141- <i>Federal Vehicle Fleets</i> - requires federal agencies and Congress to purchase light- and medium-duty vehicles with low greenhouse gas emissions (EPA to publish annual list of qualifying vehicles, does not affect tactical vehicles), 142- <i>Federal Fleet Conservation Requirements</i> - starting in 2010, reduce oil use by 20% and increase alternative fuel use by 10% from a 2005 baseline by October 1, 2015, and include a requirement to purchase energy-efficient replacement tires (Note: Act has wording that states in relation to FY2015 in this requirement, "and for each year thereafter...". As written, would require 20% decrease of petroleum and 10% increase of AF EACH year. Intent needs to be clarified. DoE to issue rules within 18 months), 246- <i>Federal Fleet Fueling Centers</i> - install at least 1 renewable fuel pump at each federal fleet fueling center (exemption for DoD facilities with annual throughput < 100k gallons)</p>
Alternate Fuels	Not Addressed	Not Addressed	<p>202 - Renewable Fuel Standard - requires those selling fuel (oil companies) to increase the amount of renewable fuel in their product (may have impact on future availability and price of fuel for tactical vehicles, JP8) 247 - Standard Specifications for Biodiesel - If American Society for Testing and Materials (ASTM) does not establish a standard for B5 and B20 within one year, then EPA must do it. B5 is a blend of 95% petroleum-based diesel fuel with 5% bio-based product and B20 is an 80% / 20% blend. 526 - Procurement and Acquisition of Alternative Fuels - Cannot buy any alternative or synthetic fuel that produces more greenhouse gasses than the equivalent conventional fuel (specifically includes mobility fuels)</p>
Toxic/hazardous chemicals & materials:	Not Addressed	Ensure that the agency reduces the quantity of toxic and hazardous chemicals and materials acquired, used, or disposed of by the agency, increases diversion of solid waste as appropriate, & maintains cost-effective waste prevention and recycling programs in its facilities.	Not Addressed

Governing Documents:

Executive Order 13123, 8 Jun 99 (Revoked by E.O. 13423 - OSD continuing some
Army Energy Strategy for Installations, 8 July 2005
Energy Policy Act of 2005, Public Law 109-58, 8 Aug 05
OSD Memo – Installation Energy Policy Goals, 18 Nov 05
DODI 4170.11 – Installation Energy Management, 22 Nov 05
Executive Order 13423, 24 Jan 07
AR 420-1 – Army Facilities Management, 2 Nov 07
Army Energy & Water Campaign Plan for Installations, 1 Dec 07
Energy Independence and Security Act of 2007, 19 Dec 07