
Energy Independence and Security Act of 2007

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Selected Sections

1. High Performance Federal Buildings (Title IV – Subtitle C)
2. Energy Savings Performance Contracting (Title V – Subtitle B)
3. Other Selected Sections
4. Provisions not adopted

1) High Performance Federal Buildings

Title IV – Subtitle C

Section 431 – Energy Reduction Goals for Federal Buildings

Section 432 – Management of Energy and Water Efficiency in Federal Buildings

Section 433 – Federal Building Energy Efficiency Performance Standards

Section 434 – Management of Federal Building Efficiency

Section 435 – Leasing

Section 441 – Public Building Life-Cycle Costs

Energy Reduction Goals for Federal Buildings

Section 431

Increases the amount of energy the Federal Agencies must reduce annually to reach a 30% reduction target by 2015, from a 2003 baseline

This Section basically puts part of E.O. 13423 into federal statute

<u>Fiscal Year</u>	<u>Percentage Reduction</u>
2007	4
2008	9
2009	12
2010	15
2011	18
2012	21
2013	24
2014	27
2015	30

Management of Energy & Water Efficiency in Federal Buildings

Section 432

Energy Managers shall be designated by each agency to implement this section and reduce energy at “covered facilities.”

Covered Facilities constitute at least 75% of facility energy use at each agency.

Comprehensive Evaluations shall be completed for 25% of covered facilities at each agency yearly, so that each facility is evaluated every 4 years.

Recommissioning measures shall be identified & assessed by energy manager

Implementation of energy and water efficiency measures – Not later than 2 years after completion of each evaluation, energy managers may:

- Implement any measure that is life-cycle cost effective
- Bundle individual measure of varying paybacks into combined projects

Follow-up shall be conducted for each measure implemented →

Management of Energy & Water Efficiency in Federal Buildings

Section 432

Follow-up shall be conducted for each measure implemented to ensure

- Equipment is fully commissioned
- O&M and Repair plan is in place and followed
- Equipment and system performance is measure during its entire life
- Energy and Water savings are measured

Guidelines and criteria are to be developed by DOE within:

- 6 months for designation of Energy Managers and Energy & Water Evals
- 1 year for Implementation of Measures and conducting Follow-up

Web-Based Tracking system shall be used by energy managers to certify compliance with evaluations, implementation and follow-up of measures →

Management of Energy & Water Efficiency in Federal Buildings

Section 432

Web-Based Tracking system shall be developed by DOE that tracks:

- Covered facilities
- Status of meeting commissioning requirements
- Estimated cost and savings for measures “required” to be implemented
- Measured savings and persistence of savings
- Benchmarking information

Web-Based Tracking system developed by DOE should:

- Use streamlined procedures & templates
- Be coordinated with other reporting requirements
- Be available to Congress, agencies & the public (Nat’l Security exemptions)

Benchmarking System shall be developed by DOE within 1 year (such as Energy Star Portfolio) and Energy Managers shall:

- Enter energy use data for metered facilities
- Include info on Web-Based Tracking system
- Update info annually and include previous year’s info for tracking changes

Management of Energy & Water Efficiency in Federal Buildings

Section 432

Scorecards shall be issued by OMB semi annual for agencies that:

- Summarize status of implementing the various requirements
- Include “other means of measuring performance”
- Are made available to Congress, agencies and the public

Authorization – Such sums as necessary

Funding Options – Agencies may use any combination of appropriated funds and private financing to carryout the provisions of this section.

Federal Building Energy Efficiency Performance Standards Section 433

Revised Performance Standards – DOE shall establish by rule standards for new and major renovated buildings (using similar buildings in 2003 as a baseline) Must reduce fossil fuel-generated energy by the following amounts:

<u>Fiscal Year</u>	<u>Percentage Reduction</u>
2010	55
2015	65
2020	80
2025	90
2030	100

(Agencies may petition for adjustment in the requirement for a specific building if technically impracticable for the agency’s specific functional need for that building)

Certification System and Level for Green Buildings shall be identified by DOE in consultation with GSA & DOD.

Management of Federal Building Efficiency

Section 434

Large Capital Investments must employ the most energy efficient design, systems, equipment and controls that are life cycle cost effective

This includes large capital energy investment in an existing building that is not a major renovation but involves the replacement of installed equipment (such as heating and cooling systems) or involves renovation, rehabilitation, expansion or remodeling of existing space.

Process for Review of Investment Decisions must be developed by each agency within 6 months to ensure this requirement is met.

Metering Requirement Expanded to Natural Gas and Steam – No later than October 1, 2016

Leasing

Section 435

Energy Star labels – 3 years after enactment of the legislation no agency may enter a lease for a building that has not earned an Energy Star label in the most recent year. Exceptions include:

- a) No space is available in an Energy Star building that meets the functional and location needs;
- b) Agency is remaining in a building previously occupied
- c) Building is of historical, architectural or cultural significance
- d) Lease is for less than 10,000 sq ft

Exception (b) requires that the building be renovated with cost effective energy efficient improvements (lighting, HVAC, windows) within a year.

Public Building Life-Cycle Costs

Section 441

This Section amends 42 USC 8254(a)(1) to change 25 years to 40 years

Sec. 8254. Establishment and use of life cycle cost methods and procedures

- (a) Establishment of life cycle cost methods and procedures The Secretary, in consultation with the Director of the Office of Management and Budget, the Secretary of Defense, the Director of the National Institute of Standards and Technology, and the Administrator of the General Services Administration, shall—
- (1) establish practical and effective present value methods for estimating and comparing life cycle costs for Federal buildings, using the sum of all capital and operating expenses associated with the energy system of the building involved over the expected life of such system or during a period of 25 40 years, whichever is shorter, and using average fuel costs and a discount rate determined by the Secretary; and
 - (2) develop and prescribe the procedures to be followed in applying and implementing the methods so established.

2) Energy Savings Performance Contracting

Title V – Subtitle B

Section 511 – Authority to Enter into Contracts and Reports

Section 512 – Financing Flexibility

Section 513 – Promoting Long-Term ESPC and Verifying Savings

Section 514 – Permanent Reauthorization

Section 515 – Definition of Energy Savings

Section 516 – Retention of Savings

Section 517 – Training of Contracting Officers to Negotiate Contracts

Section 518 – Study of Energy and Cost Savings in Non-Buildings

ESPC Sections

Authority to Enter into Contracts and Reports (Section 511)

Including Elimination of Congressional Notification process

- Requires agencies to report on “any termination penalty exposure” in addition to the energy and cost savings resulting from ESPCs
- Eliminates government-wide Congressional Notification requirement for projects over \$10M 42 USC 8287(a)(2)(D)iii
- Eliminates Defense Department Congressional Notification requirement for projects over \$7M 10 USC 2913(e)

ESPC Sections

Financing Flexibility (Section 512)

Allows the use of appropriated funds to be combined with financing to leverage ESPC projects

Promoting Long-Term ESPCs and Verifying Savings (Section 513)

Prohibits agencies from establishing a policy to limit ESPC projects to less than the maximum 25 year term. Also prohibits agencies from establishing policies to limit the size of individual projects.

Permanent Reauthorization (Section 514)

Deletes current sunset provision for 2016. Authorizes ESPC permanently

ESPC Sections

Definition of Energy Savings for ESPCs (Section 515)

- Expands definition of energy savings to “co-generation or heat recovery”
- Does NOT explicitly expand definition to Renewable Energy
- Allows for the sale or transfer of excess electric or thermal energy generated on-site from renewable energy or co-generation to utilities or non-federal users
- Allows water savings in interior or exterior applications

Retention of Savings (Section 516)

Corrects a legacy legislative problem with retention of savings provisions.

Allows agencies to retain 100% of savings on site

ESPC Sections

Training of Contracting Officers to Negotiate Contracts (Section 517)

Requires DOE to train contracting officers throughout the federal government to negotiate and “conclude effective and timely contracts”

Study of Energy Savings in Non-Building Applications (Section 518)

Calls for a federal study and report to Congress on the potential for the use of ESPCs to reduce energy in non-building applications, including

- Mobility: Vehicles, ships, planes, etc...
- Federally-owned equipment used to generate electricity

Also, a provision in the House FY08 Defense Authorization bill would have prohibited the use of ESPCs, UESCs & EULs to meet DOD’s 25% Renewable Energy Goal – **Eliminated in Conference Committee**

3) Other Selected Sections

Section 436 – High-Performance Green Federal Buildings

Section 437 – Federal Green Building Performance

Section 438 – Storm Water Runoff Requirements for Federal Projects

Section 439 – Cost-Effective Technology Acceleration Program

Section 521 – Installation of Photovoltaic System at DOE Headquarters

Section 522 – Prohibition of Incandescent Lamps by Cost Guard

Section 523 – Standard Relating to Solar Hot Water Heaters

Section 524 – Federally Procured Appliances with Standby Power

Section 525 – Federal Procurement of Energy Efficiency Products

Section 526 – Procurement and Acquisition of Alternative Fuels

Section 527 – Government Efficiency Status Reports

Section 528 – OMB Government Efficiency Reports and Scorecards

Section 529 – Electric Sector Demand Response

4) Provisions Not Adopted

National Renewable Efficiency Standard

Dropped from the final version of the legislation was a controversial provision to require electric utilities to produce 15% of their electricity from renewable energy sources by 2020. The abandoned provision would have also allowed up to 4% of the 15% (approximately 27% of the total) to be met through energy efficiency measures. Utilities would have received a credit for every kilowatt of electricity they produce from wind, solar, geothermal, tidal, ocean and biomass energy. Credits were to be traded or sold among utilities, or bought from the Department of Energy.

Currently, more than half the states have some type of renewable-electricity mandates. However, heavy lobbying against the provision and a veto threat, forced the Senate to drop the provision from the final bill.

4) Provisions Not Adopted

Tax Incentives for Renewable and Efficient Energy

Several tax provisions were eliminated from the final version of the legislation:

- **Wind** – Dropped was a proposal for a long-term extension of the renewable energy Production Tax Credit (PTC). The current PTC expires at the end of 2008. The proposal would have extended the placed-in-service date for four years to 2012 for qualifying wind, closed loop biomass, open-loop biomass, geothermal; hydropower, landfill gas and trash combustion facilities.
 - **Solar** – Dropped was a proposal for a long-term extension of the solar energy and fuel cell Investment Tax Credit (ITC). The current ITC expires at the end of 2008. The proposal would have extended the 30% ITC for eight years until 2016.
 - **Commercial Buildings** – A five year extension of the tax deduction for energy efficiency improvements in commercial buildings was also dropped. The current deduction expires at the end of 2008.
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QUESTIONS?