

S. 761, THE ENERGY SAVINGS AND INDUSTRIAL COMPETITIVENESS ACT OF 2013

Title I – Buildings

Subtitle A – Building Energy Codes

Section 101. Greater energy efficiency in building codes

The Energy Conservation and Production Act is amended to direct the Department of Energy (DOE) to support the updating of model building energy codes by codes and standards developers; the adoption of building energy codes by U.S. states, Indian tribes, and local governments; and full compliance with these codes.

The new Sec. 307 (going in logical rather than numerical order) directs DOE to support the updating of model building energy codes by independent codes and standards developers. DOE is to set by rulemaking aggregate energy savings targets for the model codes for residential and commercial buildings. The targets are to be set at the maximum level of energy efficiency that is technologically feasible and life-cycle cost effective, and are to be higher than preceding targets, take into account specified economic considerations, promote the achievement of high-performance buildings, and recognize potential savings and costs due to a range of technologies. The baseline is to be the 2009 International Energy Conservation Code (developed by the International Code Council) for residential buildings and the ASHRAE Standard 90.1-2010 for commercial buildings.

DOE is to provide technical assistance as requested by model building code-setting and standard development organizations, and to submit amendment proposals that would enable energy codes to meet the specified targets. DOE is to make publicly available the entire calculation methodology used to estimate code energy savings.

Within 15 months of any revisions to the IECC or ASHRAE Standard 90.1, DOE is to determine whether or not the revisions improve energy efficiency and meet the established targets. If, in a preliminary determination within 90 days of revisions, the revisions appear not to meet the targets, DOE is to provide recommendations to adjust the energy code such that it meets the targets. Model building code-setting and standard development organizations would then have 270 days to accept or reject the changes to meet the targets, before the final determination.

The new Sec. 304 changes the state certification process so that within two years after the date on which a model building code is updated, each state and Indian tribe is to certify whether or not it has reviewed and updated its building energy code provisions and demonstrate whether the codes in effect in the state or tribal territory have met or exceeded the energy savings of the updated model code or the established targets. If a model energy code has not been updated by a target date, the state is to follow the certification process within two years after the target date. Within ninety days

after a state or Indian tribe has submitted its certification, DOE is directed to determine whether the code provisions have met the specified criteria and if so, to validate the certification.

Within 3 years of certification of a state code, each state is to certify whether or not the code either:

- Achieved compliance: at least 90% of building space covered by the code substantially meets code requirements, or excess energy use for non-compliant buildings is not greater than 5% of energy use of all covered buildings; or
- Made significant progress: the state has developed and is implementing a plan for achieving compliance within eight years of enactment, and is meeting compliance targets under the plan.

The certification is to include documentation of the rate of compliance. DOE is to validate this certification as well.

If a state does not meet the adoption or compliance certification requirements, it is directed to submit a report on the state's status in meeting the requirements and its plan to do so. For states whose certification has not been validated, this may be a consideration for federal support under this section.

DOE is directed to submit yearly reports on the status of model building energy codes, the status of code adoption and compliance, implementation of this section, and the energy savings due to the established targets. The report is to include impacts of past and future actions under this section on issues related to costs, benefits, and returns; lifetime energy use; energy costs to businesses and individuals; and overall annual building costs.

DOE is to provide technical and financial assistance to states and Indian tribes to meet energy code requirements. Funding is to be made available to implement this section, improve and implement energy codes, and promote building energy efficiency through these codes. Additionally, each state may use up to \$750,000 to train officials to implement and enforce established codes.

DOE is directed to provide technical and financial support for the development of stretch codes and advanced standards as an option for adoption as a building code by state, local or tribal governments and for use as guidelines for energy efficient building design. Such codes and standards should achieve substantial savings compared to national model building energy codes and should meet any targets established under this bill at least three to six years in advance.

Additionally, in consultation with building science experts and institutions of higher education, DOE is to produce a report on the feasibility, impact, economics, and value of code improvements to make buildings more adaptable to be retrofitted to become zero-net-energy, code procedures to incorporate equipment and product lifetimes, and legislative options for increasing code energy savings.

This section authorizes \$200 million to be appropriated and to remain available until expended.

Subtitle B – Worker Training and Capacity Building

Section 111. Private training and assessment centers

This section would direct DOE to provide grants to establish Building Training and Assessment Centers at institutions of higher learning, modeled after DOE's Industrial Assessment Centers (IACs). These centers would identify and promote opportunities, concepts, and technologies for enhancing building energy and environmental performance; train engineers, architects, building scientists, building permitting and enforcement officials, and technicians; assist other institutions to train building technicians; promote research and development in building clean energy technologies and distributed generation; and coordinate services with technical training centers, community colleges, and other relevant offices and institutions. To avoid duplication, the Secretary should coordinate with other federal programs and Building Training and Assessment Centers, where practical, with IACs.

Title II – Private Commercial Building Efficiency Financing

Section 201. Private commercial building efficiency financing

DOE is directed to establish the "Commercial Building Energy Efficiency Financing Initiative." Under this program, grants would be provided to states to establish and expand energy efficiency retrofit financing programs for private sector and commercial buildings. Eligible financing initiatives include:

- Commercial Property Assessed Clean Energy (PACE) financing programs;
- Credit enhancement structures that mitigate the effects of default, such as loan guarantee programs, loan loss reserve programs, collateral or subordinated capital program, and others;
- Revolving loan funds;
- Programs that promote energy savings performance contracts or utility energy service contracts;
- On-bill financing or on-bill repayment mechanisms
- Interest buy-down programs;
- Secondary market financing programs;
- Leasing structures that recognize energy costs and address split-incentives;
- Educational programs involving commercial lenders, energy service companies, commercial building owners, and other stakeholders established to provide information on outcomes and build consensus;
- Other activities to significantly increase investments in, and energy savings from building retrofits.

A state receiving a grant is directed to prioritize projects that leverage funding from private and non-federal sources as well as those that explicitly aim to use private sources of funding to expand program financing. States receiving a grant are also encouraged to consider other policies and incentives that will advance energy efficiency financing.

DOE is also directed to conduct financing initiatives for larger private sector commercial, multifamily, and mixed use buildings. States or groups of states may apply for program funding for:

- Facilitation of energy performance contracts in commercial, multifamily, and mixed use buildings by providing guarantees that cover owner default risk, but not technology and other risk assumed by the contractor;

- Actions by states to work jointly with real estate owners, financiers, and other stakeholders to ensure consistency, including common underwriting standards;
- Minimum loan-to-value ratios;
- Minimum debt-to-income coverage ratios;
- Green leasing programs;
- Commercial Property Assessed Clean Energy (PACE) financing program;
- Other activities that would significantly increase total investment in, and energy savings from, building retrofits.

DOE is to consult with states and relevant stakeholders to create a process to identify eligible lenders, financiers, and building owners with real estate asset portfolios across multiple states that may be eligible for the efficiency financing initiatives for larger buildings.

DOE is to evaluate applications of both types based on the likelihood that the proposed program will be established or expanded, will increase investment and savings, and will do so in a state or region with the greatest potential for growth in investment and savings. For large building initiatives there should also be evidence of multistate cooperation and coordination with lenders, financiers, and owners.

No later than 2 years after a grant is received, the state is to submit a performance report to DOE, the Senate Committee on Energy and Natural Resources, and the House Committee on Energy and Commerce. Data from the programs and activities is to be incorporated into appropriate databases at the DOE, with provisions to protect confidential business data.

Under this provision, \$250 million is appropriated to remain available until expended. Of this amount, 50% is to be allocated under the formula used for the State Energy Program, and 50% is to be allocated to large commercial building financing initiatives with no state receiving more than 10% of the amount made available for a fiscal year. Funds provided to states shall be provided to the state energy offices. Funds will not be used for direct federal loans.

Title III – Industrial Efficiency and Competitiveness

Subtitle A – Manufacturing Energy Efficiency

Section 301. Purposes

This section aims to reform and reorient DOE's industrial efficiency programs, establish a clear authority for these programs, accelerate the deployment of technologies and practices that will increase industrial efficiency and manufacturing efficiency, stimulate economic growth and industrial productivity and competitiveness, and strengthen partnerships among the government agencies and private and academic sectors.

Section 302. Future of Industry program

Section 452 of the Energy Independence and Security Act of 2007 (EISA), titled "Energy-intensive industries program," is renamed the "Future of industry program."

For the Industrial Assessment Centers (IACs) authorized in Section 452, this bill would clarify that their purpose includes assessments of sustainable manufacturing goals and the implementation of information technology advancements.

To increase the value and capabilities of IACs, the centers are directed to coordinate with the Manufacturing Extension Partnership Centers of the National Institute of Standards and Technology and DOE's Building Technologies Program, to increase partnerships with the national laboratories and energy service and technology providers, to identify opportunities to reduce greenhouse gas emissions, and to promote sustainable manufacturing practices for small- and medium-sized manufacturers. DOE is directed to provide funding for IACs to conduct informational outreach activities to inform small- and medium-sized manufacturers of available assistance and to coordinate activities with state and local governments, utilities and energy service providers, regional energy efficiency organizations, and other IACs.

DOE is directed to cover 50% of the cost of internship programs under which students work with and for industries, manufacturers, and energy service providers to implement the recommendations of IACs.

The Small Business Administration is directed to expedite consideration of applications for loans under the Small Business Act to implement recommendations by the IACs.

Finally, in the IAC authorization an Advanced Manufacturing Steering Committee is to be established by DOE to provide recommendations on planning and implementation of the DOE's Advanced Manufacturing Office.

Section 303. Sustainable manufacturing initiative

The Energy Policy and Conservation Act is amended to add Section 376, "Sustainable Manufacturing Initiative," which would direct DOE's Office of Energy Efficiency and Renewable Energy to provide onsite technical assessments to manufacturers upon request. The assessments would identify opportunities to maximize the energy efficiency of industrial processes and cross-cutting systems, prevent pollution and minimize waste, reduce the use of water in manufacturing processes, and conserve natural resources. The initiative would operate in coordination with the private sector and appropriate agencies, including the National Institute of Standards and Technology, to accelerate adoption of technologies or processes that improve energy efficiency. In addition, this section would authorize a joint industry-government partnership program as part of industrial programs at DOE to research, develop, and demonstrate new sustainable manufacturing and industrial technologies and processes.

Section 304. Conforming amendments

Section 106 of the Energy Policy Act of 2005, "Voluntary commitments to reduce industrial energy intensity," is repealed. Sections 131, 132, 133, 2103, and 2107 of the Energy Policy Act of 1992 are repealed, and section 2101(a) is amended to reflect these changes.

Subtitle B – Supply Star

Section 311. Supply Star

The Energy Policy and Conservation Act is amended to add a Section 324B to establish a Supply Star program within DOE to identify and promote practices, recognize companies, and recognize products that use highly efficient supply chains in a manner that conserves energy, water and other resources. In addition to promoting existing efficient supply chain practices, this section directs DOE to collect and disseminate data on supply chain energy resource consumption, develop and disseminate metrics for evaluating supply chain energy resource use, and develop sector level guidance for improving supply chain efficiency. DOE is also directed to work with industry and small business to improve supply chain efficiency through sharing best practices, providing benchmarking opportunities, and supporting professional training. The Supply Star program is to coordinate efforts with the Energy Star program.

DOE may award competitive grants or other incentives for supply chain efficiency and is to use funds to support professional training programs. Impacts on climate change and outsourcing of American jobs to manufacture products shall not factor in determining supply chain efficiency.

Total authorization for the section is \$10,000,000 for the period of fiscal years 2014 through 2023.

Subtitle C – Electric Motor Rebate Program

Section 321. Energy saving motor control rebate program

DOE is directed to create an incentive for the purchase of new constant speed electric motor controls that reduce a motor's energy use by not less than 5%. The rebate would be worth \$25 per horsepower of the motor. \$5 million is authorized to be appropriated for this provision for each of fiscal years 2014 and 2015, to remain available until expended.

Subtitle D – Transformer Rebate Program

Section 331. Energy efficiency transformer rebate program

DOE is directed to create an incentive for the purchase of new energy efficient transformers by owners of industrial or manufacturing facilities or commercial or multifamily residential buildings. Qualified transformers must meet or exceed the National Electrical Manufacturers Association (NEMA) Premium Efficiency designation, having at least 30% fewer losses than NEMA's 2002 standard for a transformer with the same phases and capacity.

The rebate is to be worth:

- For 3-phase transformers:
 - If capacity is not greater than 10kVA, \$15 per kVA;
 - If capacity is between 10kVA and 100kVA, a scaled amount between \$15 and \$5 per kVA;
 - If capacity is greater or equal to 100kVA, \$5 per kVA; and
- For single-phase transformers, 75% of the rebate for a 3-phase transformer of same capacity.

\$5 million is authorized to be appropriated for this provision for each of fiscal years 2014 and 2015, to remain available until expended, but the authority provided by this section terminates effective December 31, 2015.

Title IV – Federal Agency Energy Efficiency

Section 401. Adoption of information and communications technology power savings techniques by Federal Agencies

No later than 360 days after this bill is enacted, DOE, in consultation with the Department of Defense, the Department of Veterans Affairs, and the General Services Administration, is to issue recommendations for federal agencies to employ energy efficiency and energy savings tools through the use of information and communications technologies, including computer hardware, operation and maintenance processes, energy efficiency software, and power management tools. No later than 180 days after this guidance has been issued, each federal agency is directed to submit a report detailing the implementation strategy and estimated energy and cost savings under this guidance.

Section 402. Availability of funds for design updates

The General Services Administration is allowed, for any project for which congressional approval has been received and the design has been completed but for which construction has not begun, to use appropriated funding to update the building's design to meet energy efficiency and other standards and codes for new federal buildings. Funds used for this purpose could not exceed 125% of the estimated energy or other cost savings resulting from the design changes.

Section 403. Natural gas and electric vehicle infrastructure

The National Energy Conservation Policy Act is amended to allow the federal government to participate in utility incentive programs and energy savings performance contracts that include measures to support the use of natural gas and electric vehicles, the necessary fueling or charging infrastructure, and the use of utility energy service contracts for these purposes.

Section 404. Federal data center consolidation

The Office of E-Government and Information Technology within the Office of Management and Budget is directed to develop and publish a goal for energy and cost savings and increased productivity by consolidating federal data centers for the five year period beginning on the date this bill is enacted. This goal should be developed no later than 180 days after the enactment of this bill, and should include a yearly breakdown of projected savings and productivity gains.

Title V – Miscellaneous

Section 501. Offset

Section 422 of the Energy Independence and Security Act of 2007 is amended to reduce authorization levels for the Zero-Net-Energy Commercial Building Initiative from \$200 million a year to \$130 million for fiscal year 2014 and \$100 million for each of fiscal years 2015 through 2017.

Section 502. Budgetary Effects

The budgetary effects of the bill under PAYGO regulations shall be determined by the latest Senate Budget Committee statement on the bill.

Section 502. Advance appropriations required.

Authorizations for appropriations under this bill shall be applicable only insofar as such sums are actually appropriated.

The bill and its summary are available at <http://www.govtrack.us/congress/bills/113/s761/text>