S. 1392, THE ENERGY SAVINGS AND INDUSTRIAL COMPETITIVENESS ACT OF 2013

Senators Jeanne Shaheen (D-N.H.) and Rob Portman (R-Ohio) introduced a revised version of the Energy Savings and Industrial Competitiveness Act (S. 1392) on July 30, 2013. S. 1392 is very similar to the version that cleared the Energy and Natural Resources Committee (S. 761), but it does not contain Title II, the Commercial Building Efficiency Financing Initiative. This bill also adds a new career skills program to provide grants to nonprofit partnerships in the Buildings Title (Title I), adds an expanded class of motors eligible for the rebate program in the Industrial Efficiency Title (Title II), and strikes the electric vehicle and natural gas section in the Federal Agency Title (Title III).

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. This subtitle authorizes $10 million to be appropriated and to remain available until expended.

**Section 112. Career skills training**
This section would create a new career skills training program to provide grants to nonprofit partnerships where student receive both classroom instruction and on-the-job efficiency training. It authorizes $10 million to be appropriated and to remain available until expended.

**Title II – Industrial Efficiency and Competitiveness**

**Subtitle A – Manufacturing Energy Efficiency**

**Section 201. 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 202. 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 203. 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 204. 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 211. 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 221. 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%, or fulfill other energy savings criteria. 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 231. 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 III – Federal Agency Energy Efficiency

Section 301. 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 302. 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 303. 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 IV – Miscellaneous

Section 401. Offset

Section 402. 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 403. 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