

Side by Side Comparison of Shaheen-Portman, S. 2262, Title I and Blackburn-Schrader H.R. 5027

In April 2014, Senators Shaheen (D-N.H.) and Portman (R-Ohio) reintroduced S. 2262, the Energy Savings and Industrial Competitiveness Act (Shaheen-Portman). In July, Representatives Blackburn (R-TN) and Schrader (D-OR) introduced H.R. 5027 to promote energy savings in residential and commercial buildings and industry, and for other purposes, which was referred to the Committee on Energy and Commerce. Below is a detailed comparison between the two bills.

S. 2262	H.R. 5027
<u>Section 101: Greater Energy Efficiency in Building Codes</u>	
(a) Includes definitions of relevant building energy codes. Amends the State Building Energy Efficient Codes—Section 304 of the Energy Conservation and Production Act.	(a) Similar to S. 2262, but includes addition clarifications for technically feasible and simple payback.
Model Building Energy Code—defined as a voluntary building energy code or standard developed and updated through a consensus process among interested persons, such as the IECC or the code used by ASHRAE, ICC or other appropriate organizations.	Model Building Energy Code— No substantive change.
Not in S. 2262.	ASHRAE Standard 90.1—The term ‘ASHRAE Standard 90.1’ means the American Society of Heating, Refrigerating and Air Conditioning Engineers ANSI/ASHRAE/IESNA Standard 90/1 Energy Standard for Buildings Except Low-Rise Residential Buildings.
Indian Tribe—The term ‘Indian tribe’ has the meaning given the term in section 4 of the Native American Housing Assistance and Self-Determination Act of 1996 (25 U.S.C. 4103).	Indian Tribe— Identical to S.2262.
Not in S. 2262.	Simple Payback—The term ‘simple payback’ means the time in years that is required for energy savings to exceed the incremental first cost of a new requirement or code.
Not in S. 2262.	Technically Feasible—The term ‘technically feasible’ means capable of being achieved, based on widely available appliances/equipment, technologies, materials, and construction practices.

Section 304: Updating State Building Energy Efficiency Codes	
<p>(a) Directs the secretary to “encourage and support the adoption of building energy codes” by States, Indian tribes, local governments that “meet or exceed the model building energy codes, or achieve equivalent or greater energy savings.</p>	<p>(a) Directs only for the Secretary to provide “Technical assistance” for the implementation of codes building energy codes that are “technically feasible and cost-effective.”</p>
<p>(b) States and Indian Tribe Certification of Building Energy Code Updates—</p> <p>Requires states or Indian tribes to review and update energy provisions in building codes within 2 years.</p> <p>State/Tribe Certification Requires:</p> <p>“(B) Demonstration.--The certification shall include a demonstration of whether or not the energy savings for the code provisions ... meet or exceed--</p> <p>“(i) the energy savings of the updated model building energy code; or</p> <p>“(ii) the targets established under section 307(b)(2).”</p> <p>(C) Within 2 years, the State/tribe must certify whether or not they have reviewed and updated the energy provisions of the building code of the State.</p> <p>(2) Validation by secretary</p> <p>—Not later than 90 days after such certification (1), DOE shall—</p> <p>“(A) determine whether the code provisions meet the criteria; and</p> <p>“(B) if the determination is positive, validate the certification.</p>	<p>(b) States and Indian Tribe Certification of Building Energy Code Updates—</p> <p>Requires states and Indian tribes to review and update energy provisions in building codes within 3 years.</p> <p>State/Tribe Certification Requires: Does not require a demonstration, only a statement.</p> <p>“(B) Demonstration.--The certification shall include a statement of whether or not the energy savings for the code provisions ... meet or exceed--</p> <p>“(i) the energy savings of the updated model building energy code; or</p> <p>“(ii) the targets established under section 307(b)(2).”</p> <p>(C) Within 3 years, the State/tribe must certify whether or not they have reviewed and updated the energy provisions of the building code of the State.</p> <p>(2) Validation by secretary</p> <p>Changes the validation so that the DOE validates if the certification (which requires only a statement, not a demonstration) is complete, and requires validation, if it is complete.</p> <p>—Not later than 90 days after such certification (1), DOE shall—</p> <p>“(A) determine whether the code provisions meet the criteria; and</p> <p>“(B) determine whether the certification submitted is complete,</p>

<p>(C) Not in S. 2262.</p> <p>Limitation is not in S. 2262.</p>	<p>“(C) if the requirements of subparagraph (B) are satisfied, validate the certification.</p> <p>(3) Inserts limitation that this section does not require state or Indian tribes to adopt building codes.</p>
<p>(c) Improvements in Compliance with Building Energy Codes—Requires states and Indian tribes, within 3 years, to certify they have made significant progress or achieved full compliance with applicable model building energy codes. Independent inspections of buildings will ensure continued measurement of compliance. For states and Indian tribes to be in compliance, at least 90% of building space covered by the code in previous year must be covered by applicable code or achieve greater energy savings.</p> <p>Certification validation is the same as above section.</p> <p>Limitation is not in S. 2262.</p>	<p>(c) Improvements in Compliance with Building Energy Codes—Similar to S. 2262, but does not require independent inspections.</p> <p>Reiterates changes to validation of certification: so that the Secretary validates if the certification (which requires only a statement, not a demonstration) is complete, and requires that the Secretary validate, if it is complete.</p> <p>Places limitation by stating this section does not require state or Indian tribes to adopt building codes.</p>
<p>(d) States or Indian Tribes that Do Not Achieve Compliance—Entities that do not meet the certification requirement by target deadline must:</p> <ul style="list-style-type: none"> - Submit a report to the Secretary of the status of compliance. - Submit a plan for meeting the requirement and certification. <p>Not in S. 2262.</p> <p>Entities that do not meet the certification requirement by target deadline may be considered for federal support.</p>	<p>(d) States or Indian Tribes that Do Not Achieve Compliance— Entities that do not meet the certification requirement by target deadline are not required to submit a plan for meeting the requirement and certification.</p> <p>This section also expresses state sovereignty, which states that entities are not required to adopt building codes.</p> <p>No federal support is authorized within this section.</p>

<p>DOE will also submit annual reports to Congress on the status of model building codes and their impacts.</p>	<p>Same as S. 2262.</p>
<p>(e) Technical Assistance to States and Indian Tribes— Allows DOE to provide technical assistance for implementation of residential and commercial energy codes, demonstrations to show energy savings, and documentation of compliance. Also outlines the types of technical assistance that DOE can undertake.</p> <p>Requires that DOE provide technical assistance to demonstrate that code provisions achieve greater energy savings than model building energy codes.</p>	<p>(e) Technical Assistance to States and Indian Tribes— DOE may only provide technical assistance to implement or document rate of compliance with residential or commercial building codes.</p> <p>Demonstration provision is removed in H.R. 5027.</p>
<p>(f) Availability of Incentive Funding—</p> <p>In General—DOE will provide incentive funding to implement and improve residential and commercial building codes, to increase and verify compliance with codes, to train local building code officials, and promote building energy efficiency through codes.</p> <p>Additional Funding—funding will be provided for implementation of a plan to achieve and document full compliance with building codes.</p> <p>Not in S. 2262.</p> <p>Training—Funding up to \$750,000 is made available for training of State or tribal building code officials to implement and enforce building codes.</p> <p>Local Governments—States may share grants to local governments that implement and enforce codes.</p>	<p>(g) Federal Support—</p> <p>In General— DOE shall support State and tribes to implement the reporting requirements, to implement building energy codes. Promotion section removed.</p> <p>Not in H.R. 5027.</p> <p>Exclusion—No support will be given to support adoption and implementation if DOE determines codes are not cost-effective.</p> <p>Training—Similar to S. 2262. DOE may offer support for training, but does not make funding available.</p> <p>Local Governments— States may work with local governments under this section, but not explicitly stated they may share grants.</p>
<p>Not in S. 2262.</p>	<p>(f) Technical Assistance to States and Indian Tribes—</p> <p>Prescribes the technical assistance DOE is allowed to provide, adds exclusion on certain DOE activities, and adds a provision on</p>

	<p>information transparency.</p> <p>Specifies compliance with a performance-based pathway.</p> <p>Exclusion—specifies that ‘technical assistance’ shall not include actions that advocate, promote, or discourage the adoption of a particular building energy code, code provision, or energy savings target to a State or Indian tribe.</p> <p>Provides that information provided by the Secretary, attendant to any technical assistance is deemed ‘influential information’ according to 67 Federal Register 8452 (Feb. 22, 2002).¹</p>
<p>(g) Stretch Codes and Advanced Standards—</p> <p>Prescribes that DOE shall provide technical and financial support for the development of stretch codes and advance standards for residential and commercial buildings. Specifies these stretch codes can be used as an option for adoption as building energy codes</p> <p>Targets—These standards must achieve substantial energy savings targets at least 3 to 6 years in advance of target years.</p>	<p>Not in H.R. 5027.</p>
<p>Not in S. 2262.</p>	<p>(h) Voluntary Programs to Exceed Model Building Energy Code—</p> <p>In General— DOE will provide technical assistance described in subsection (f) to develop voluntary incentive programs and non-binding guidelines for building designs that exceed model building energy codes.</p> <p>Targets—these voluntary programs must be designed to achieve substantial energy savings compared to model building codes and meet</p>

¹“Influential”, when used in the phrase “influential scientific, financial, or statistical information”, means that the agency can reasonably determine that dissemination of the information will have or does have a clear and substantial impact on important public policies or important private sector decisions. Each agency is authorized to define “influential” in ways appropriate for it given the nature and multiplicity of issues for which the agency is responsible. <http://www.whitehouse.gov/sites/default/files/omb/fedreg/reproducible2.pdf>.

	targets, if available, up to 3 to 6 years in advance
(h) Studies— Similar to S. 2262, but only requires Feasibility Study and instead measures payback period over lifetime of the code instead of 10 years.	<p>(i) Studies— GAO Study—Requires GAO to study the impacts of updating national model building codes. Considerations include the energy savings from updating the codes, the actual consumer cost savings, and accounting of expenditures of the Federal funds under each program authorized.</p> <p>Feasibility Study—DOE, in consultation with other experts and stakeholders, must study the feasibility, impact, and economics of:</p> <ul style="list-style-type: none"> - Code improvements that require building design, siting, and constructed so they can be adapted to net-zero buildings in the future; - Code procedures to incorporate 10 year payback in calculations - Legislative options for increasing energy savings from building codes <p>Energy data in multi-tenant buildings—DOE required to undertake study of best practices of aggregate energy consumption information to owners and building managers.</p>
(i) Effect on Other Laws—No section supersedes or modifies the application of Section 321-346 of Energy Policy and Conservation Act	(j) Effect on Other Laws—Identical to S. 2262.
Not in S. 2262.	(k) Funding Limitations—No federal funding will be used to support the actions of DOE, or the States to advocate, promote, or discourage the adoption of a building energy code, code provision, or energy saving target.
(j) Authorization of Appropriations—This section authorizes \$200,000,000 to remain available until expended.	Not in H.R. 5027.
(c) Federal Building Energy Efficiency Standards—Amends the Energy Conservation and production Act to replace “voluntary building energy codes” with “model building energy codes.”	(c) Federal Building Energy Efficiency Standards—Identical to S. 2262.
(d) Model Building Energy Codes—Amends section 307 of the Energy Conservation and Production Act (42 U.S.C. 6836).	(d) Model Building Energy Codes— Identical to S. 2262.

Section 307: Support for Model Building Energy Codes	
<p>a) In General—DOE shall support the updating of model building energy codes.</p>	<p>(a) In General—DOE shall provide technical support for the updating of model building energy codes.</p>
<p>(b) Targets—DOE shall to provide support the updating of model building energy codes. DOE shall also support updating of codes to enabled achievements of established aggregate energy savings targets.</p> <ul style="list-style-type: none"> - DOE will work with State, Indian tribes, local governments, and other stakeholders for updating codes by establishing one of more aggregate energy savings targets. DOE may establish separate targets for both residential and commercial buildings. - Baselines for updating codes are 2009 IECC for residential and ASHRAE 90.1-2010 for commercial buildings. - Specific, yearly targets shall be established and revised by DOE through collaboration with recognized code and standards developers that maximize energy efficiency and life-cycle cost effectiveness. Targets must be high than preceding targets, and promote the achievement through performance energy efficiency. - Initial Target must be established within 1 year. DOE may also set a later target year for any model building energy codes if determined that target cannot be met. - When establishing targets, DOE must ensure compliance with the Small Business Regulatory Enforcement Fairness Act of 1996. 	<p>(b) Targets—DOE required to provide technical assistance for updating model building codes. DOE shall also provide technical assistance for updating codes.</p> <ul style="list-style-type: none"> - DOE will provide technical assistance to States, Indian tribes, local governments, and other stakeholders for updating codes by establishing one or more aggregate energy savings targets through rulemaking in accordance with Section 553 of Title 5, United States Code. Separate targets may be established for residential and commercial buildings. - Identical to S. 2262. - Similar to S. 2262 with slight differences. Specific yearly targets must be in accordance with Section 552 of title 5, United States Code. Targets are not required to be life-cycle cost effective or higher than preceding target. - Identical to S. 2262. - When establishing targets, DOE must ensure compliance with the Small Business Regulatory Enforcement Fairness Act of 1996 for any indirect economic effect on small entities that is reasonable foreseeable and a result of such rule.

<p>Appliance & Other Considerations—In establishing building code targets, DOE shall develop or adjust targets in recognition of potential energy and costs savings related to appliance standards and other factors impacting building energy use.</p> <p>Economic Considerations—Economic feasibility and potential costs to consumers must be considered when developing and revising code targets and including a return on investment analysis.</p>	<p>Appliance & Other Considerations— In establishing energy savings targets, DOE shall develop or adjust targets in recognition of potential energy and costs savings related to appliance standards and other factors impacting building energy use.</p> <p>ECONOMIC CONSIDERATIONS.—The economic feasibility of achieving the proposed targets and the potential costs and savings for consumers and building owners must be considered by conducting a return on investment analysis, using a simple payback methodology over a 3-, 5-, and 7-20 year period.</p> <p>The Secretary is prohibited from proposing or providing technical or financial assistance for any code, provision, energy target, or amendment that has a payback greater than 10 years.</p>
<p>(c) Technical Assistance to Model Building Energy Code-Setting and Standard Development Organizations—</p> <p>As requested, DOE shall provide technical assistance to model building energy code setting and standard development organizations.</p> <p>Not in S. 2262.</p> <p>Analysis and Methodology— all calculation methodology will be made public by DOE.</p>	<p>(c) Technical Assistance to Model Building Energy Code-Setting and Standard Development Organizations—</p> <p>As requested, DOE shall provide technical assistance to “modelment” organizations to implement.</p> <p>Exclusion— Defines technical assistance as activities that do not advocate, promote, or discourage the adoption of a particular building energy code, code provision, or energy savings target.</p> <p>Information Quality and Transparency — Information used to develop energy savings targets is considered influential information and must meet certain guidelines (See footnote 1).</p>

<p>(d) Amendment Proposals—DOE may submit amendment proposals to building codes and standard development organizations with supporting evidence that will allow energy codes to meet the established targets.</p> <p>Not in S. 2262.</p>	<p>(d) Amendment Proposals— Nearly identical to S. 2262, but further specifies the process and factors that amendments must go through.</p> <p>Process and Factors—Information provided by DOE is considered “influential information” and must meet guidelines established by OMB (see footnote 1) DOE will also use climate zone weighted averages for equipment heating, cooling, ventilation systems, and water heating systems, using equipment that is actually installed.</p>
<p>(e) Administration— DOE required to publish notice of targets and supporting analysis and determinations to the Federal Register.</p> <p>Opportunity for public comment will also be established.</p>	<p>(h) Administration— DOE required to publish notice of targets, amendment proposals, and determinations to the Federal Register. Supporting documents include modeling, data, assumptions, protocols, and cost benefit analysis, including return on investment.</p> <p>Opportunity for public comment will also be established in accordance with section 553 of title 5, United States Code.</p>
<p>Not in S. 2262</p>	<p>(f) Methodology Development— DOE shall establish methodology to evaluate cost-effectiveness of energy code changes in multifamily buildings that incorporate various economic parameters.</p>
<p>(f) Voluntary Codes and Standards—Any other provision or model building code or standard will not be binding on State, local governments, or Indian tribes as matter of federal law.</p>	<p>(i) Voluntary Codes and Standards—Nearly identical to S. 2262.</p>
<p><u>Section 111: Building Training and Assessment Centers</u></p>	
<p>DOE shall provide grants to universities to establish building training and assessment centers to:</p> <ul style="list-style-type: none"> - Identify opportunities for optimizing energy efficiency and environmental performance in buildings; 	<p>DOE shall provide grants to universities to establish building training centers to:</p> <ul style="list-style-type: none"> - Identify opportunities for optimizing energy efficiency and environmental performance in buildings;

<ul style="list-style-type: none"> - Promote the application of emerging concepts and technologies in commercial and institutional buildings; - Train engineers, architects, building scientists, building energy permitting and enforcement officials, and building technicians in energy-efficient design and operation; - Assist institutions of higher education and Tribal Colleges or Universities in training building technicians; - Promote research and development for the use of alternative energy sources and distributed generation to supply heat and power for buildings, particularly energy-intensive buildings; and - Coordinate with and assist State-accredited technical training centers, community colleges, Tribal Colleges or Universities, and local offices of the National Institute of Food and Agriculture and ensure appropriate services are provided under this section to each region of the United States. <p>Authorizes \$10,000,000 to be available until expended.</p>	<ul style="list-style-type: none"> - Promote the application of emerging concepts and technologies in commercial and institutional buildings; - Train engineers, architects, building scientists, building energy permitting and enforcement officials, and building technicians in energy-efficient design and operation. - Not in H.R. 5027. - Not in H.R. 5027. - Not in H.R. 5027. <p>No funds are authorized.</p>
<p>Not in S. 2262.</p>	<p><u>Section 201: Voluntary Nature of Building Asset Rating program</u></p> <p>DOE may enable the owner of commercial or residential building to obtain rating score or label for actual or anticipated energy use or performance. Emphasizes that any information made available by DOE is not intended to be the basis for regulatory program by the Federal, State, local, or municipal government body.</p>