

# Energy Savings and Industrial Competitiveness Act of 2014

## A Bipartisan Energy Efficient Effort for Government, Industry, and Buildings

The Energy Savings and Industrial Competitiveness Act of 2014 (ESICA), introduced by Senators Jeanne Shaheen (D-NH) and Rob Portman (R-OH), is a bipartisan effort to increase energy efficiency in buildings, industry, and the federal government. The broadly supported goals are to save taxpayer dollars, promote job growth, and cut carbon pollution by increasing investments in energy efficient buildings and technologies. Importantly, ESICA was developed through extensive review by a broad group of stakeholders and is the product of a painstaking four-year process to design a meaningful bill. That is one reason that ESICA has received such a wide array of support. Keeping the bill free of amendments and consensus-based is critical to implementing important efficiency gains that would benefit all Americans.



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## OVERVIEW

ESICA was initially introduced in 2011, and an updated version is now before the Congress. Its sponsors say the newest version is estimated to create as many as 190,000 jobs, saving \$16 billion annually and avoiding emissions equivalent to taking 22 million cars off the road. Assuming aggressive implementation scenarios, the 2013 version was projected to add up to 66,000 jobs, and save \$2.1 billion and 0.3 quadrillion Btu of electricity in 2020 (the United States uses 100 “quads” per year) while avoiding up to 16.4 million metric tons (MMT) of carbon pollution. By 2030, those numbers were projected to grow to 164,000 jobs, \$13.7 billion, and 1.5 quads of annual savings, and 80.2 MMT—the equivalent of taking 16.7 million cars off the road.<sup>1</sup>

Specifically, ESICA is aimed at reducing energy use in buildings, industry, and the federal government, which is the single largest energy consumer in the nation.<sup>2</sup> Energy efficiency reduces harmful pollution and leads to new jobs in the energy efficiency industry and in other parts of the economy when people and industries divert funds once needed to cover energy costs.<sup>3</sup> The Energy Savings and Industrial Competitiveness Act represents one part of the suite of actions our country can take to build a safer, cleaner, and more economically vibrant economy.

## TITLE I: BUILDINGS

The bill aims to help states, Indian tribes, and local communities increase efficiency in residential and commercial buildings—which represent 41 percent of the nation’s energy use—through higher levels of building energy code adoption and enforcement. The U.S. Department of Energy (DOE) would develop energy-savings targets for building codes, and a group of experts would regularly update a voluntary model building energy code to achieve those goals. Each state and Indian tribe would be required to report on whether the model building energy code has been adopted, as well as on how any existing building codes comply with the model code and the amount of energy saved. States that do not certify code adoption would not receive federal support (technical and financial) in achieving energy-savings targets under ESICA. The bill authorizes \$200 million for the model building energy code initiative, of which not more than \$750,000 will go to individual states to train building code officials to implement and enforce the newly adopted codes. The measure also includes \$10 million for building and assessment centers that identify opportunities for efficiency improvements, and \$10 million for career-skills training related to efficient improvements and technologies.

## TITLE II: INDUSTRIAL EFFICIENCY AND COMPETITIVENESS

ESICA aims to accelerate the development and deployment of energy efficient industrial technologies and practices by: coordinating research with private and academic groups on reducing energy use and promoting sustainable manufacturing practices; working with manufacturers to assess and maximize energy efficiency; encouraging sustainable supply chains through a Supply Star program; and offering temporary incentives for certain efficiency technologies.

Industrial Research and Assessment Centers would be created to coordinate research by public and private entities to focus on sustainable manufacturing, data collection on supply chain logistics, and more. The Supply Star program would identify and promote energy efficient practices and recognize companies and certain products with exceptionally efficient supply chains that conserve energy, water, and other resources. DOE would use Supply Star data to develop systematic methods to evaluate and improve supply chains efficiency. Finally, ESICA creates incentives for qualified electric motors and transformers. Under the bill, the Supply Star program and rebates would not exceed \$30 million from 2014 to 2023.

## TITLE III: FEDERAL AGENCY ENERGY EFFICIENCY

This section would promote energy efficiency in federal agencies through building design, and information and communications technologies. The Office of Management & Budget (OMB) would work with federal agencies to choose and implement the best energy-saving and energy-efficient information technologies, such as smart meters and improved tools to enable working from home. In addition, the federal government would reaffirm its commitment to consolidate and optimize its data centers over the next five years. Federal data centers are responsible for at least 10 percent of all U.S. data center energy use, costing American taxpayers \$600 million a year in electricity bills and producing 3 million tons of carbon dioxide annually, equivalent to the annual output of three large coal-fired power plants.<sup>4</sup>

## 2014 UPDATE

The newest version of ESICA includes several additions:

In addition to model building codes, the bill also would facilitate renewable energy, energy efficiency, and energy retrofit projects in schools and leased commercial buildings through information-sharing and at no additional cost. For instance, DOE would help to connect schools with existing

federal programs across a variety of federal agencies for funding efficiency retrofits and renewable energy projects.

In a provision widely endorsed by private industry and energy efficiency advocates, the bill establishes a voluntary Tenant Star certification and recognition program to promote energy efficiency in leased space—representing at least half of the \$20 billion of annual energy expenses by commercial buildings—during design and occupancy.

The bill also includes an innovative, public-private partnership approach to energy or water cost savings through a demonstration program under the Department of Housing and Urban Development (HUD). Private investors would fund the upfront costs of retrofits to up to 20,000 low-income residences in multifamily housing, and be reimbursed by HUD with the related savings from reduced utility bills.

Several regulations are revised by the Act to reduce the cost of compliance with efficiency targets. Thermal storage water heaters, which would otherwise not comply with upcoming efficiency standards, would be exempt from the standards if used in demand response programs. DOE would accept verification by independent certification programs for heating, air conditioning equipment, and water heating products, as long as those programs meet specific qualifications.

Finally, while the bill would unfortunately repeal a provision of earlier legislation requiring that new federal buildings attain a zero-carbon footprint by 2030, it would also strengthen energy efficiency provisions for federal buildings and includes an updated version of the proposed SAVE Act, which would require federally backed residential mortgage loans to begin to account for the borrower's expected utility savings in efficient houses.<sup>5</sup> Agencies such as Fannie Mae, Freddie Mac, and FHA would make adjustments in the



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underwriting and appraisal process to recognize houses that are more energy efficient, which leads to lower energy expenses. In 2012, more than 100,000 new homes sold were high-performance ENERGY STAR® houses.<sup>6</sup> It makes sense for the federal mortgage agencies to recognize these important market trends.

## ESICA COSTS AND BENEFITS

Estimates of the benefits of ESICA are significant. While ESICA is estimated to have a total cost to the federal government of \$357.5 million from 2014-2018, the bill calls for it to be offset by cutting \$362.5 million in appropriations over the same period for the Zero Net Energy Commercial Buildings Initiative, a program aimed to reduce commercial building energy consumption that was enacted in the Energy Independence and Security Act of 2007.<sup>7</sup> The 2014 ESICA would not affect revenues, nor enact any private-sector mandates. The measure does not require, but only encourages, compliance with the national model building energy codes so the only cost imposed upon states and tribal governments would be for certification to DOE of whether residential and commercial building codes were updated to meet the new standards.<sup>8</sup>

## CONCLUSION

ESICA is a helpful bill that makes a commitment to extend technical or financial assistance to states or localities that choose to promote energy efficiency. Aside from mandatory reporting of building code compliance, the measure contains no new regulations or requirements for state or private sector action. Instead, it supports the continual update of a national model building energy code in order to give interested states and localities a target for energy savings. The bill also encourages cooperation between industry and DOE to maximize industrial efficiency and improve productivity. Finally, it encourages the federal government to lead by example through sincere energy efficiency improvements and commits it to work constructively with industry, energy service and technology providers, and academic circles to develop and implement energy-saving technology.

In short, ESICA is a solid, broadly supported bill that would benefit consumers and the environment. It is also a healthy reminder that energy efficiency is the nation's cheapest and most readily available clean energy resource. Every member of Congress should embrace the bipartisan, cooperative spirit that led to this bill, pass it "clean," and then keep working together to build on its foundation.

## Endnotes

- 1 Young et al., "Economic Impacts of the Energy Efficiency Provisions in the Energy Savings & Industrial Competitiveness Act of 2013 and Select Amendments," ACEEE white paper, September 2013; Nadel, Steven, "Hearing on S. 1084, S. 717 and Other Pending Energy Efficiency Legislation," (Testimony of Steven Nadel to the Senate Energy and Natural Resources Committee, Subcommittee on Energy, June 25, 2013). A recent study has the bill creating 190,000 jobs and saving more than \$16 billion annually in energy costs, with avoided emissions equivalent to taking 22 million cars off of the road.
- 2 Senate Committee on Energy and Natural Resources, *Energy Savings And Industrial Competitiveness*, 113th Congress, 1st session, 2013, S. Report 113-37, 6.
- 3 Farley et al, May 2012.
- 4 Mazmanian, Adam, "Supporters renew push for federal data center bill," *FCW: The Business of Federal Technology*, November 20, 2013.
- 5 Henderson, Philip. "Sensible Leadership from Senators Bennet and Isakson to Correct Mortgage Flaw," Blog, NRDC, June 7, 2013.
- 6 "2012 ENERGY STAR Certified New Homes Market Indices for States," ENERGY STAR Website, 2012.
- 7 Energy Security and Industrial Competitiveness Act of 2013, S 761, 113th Congress, 1st sess.
- 8 Congressional Budget Office, *Energy Security and Industrial Competitiveness Act of 2013*, May 21, 2013.