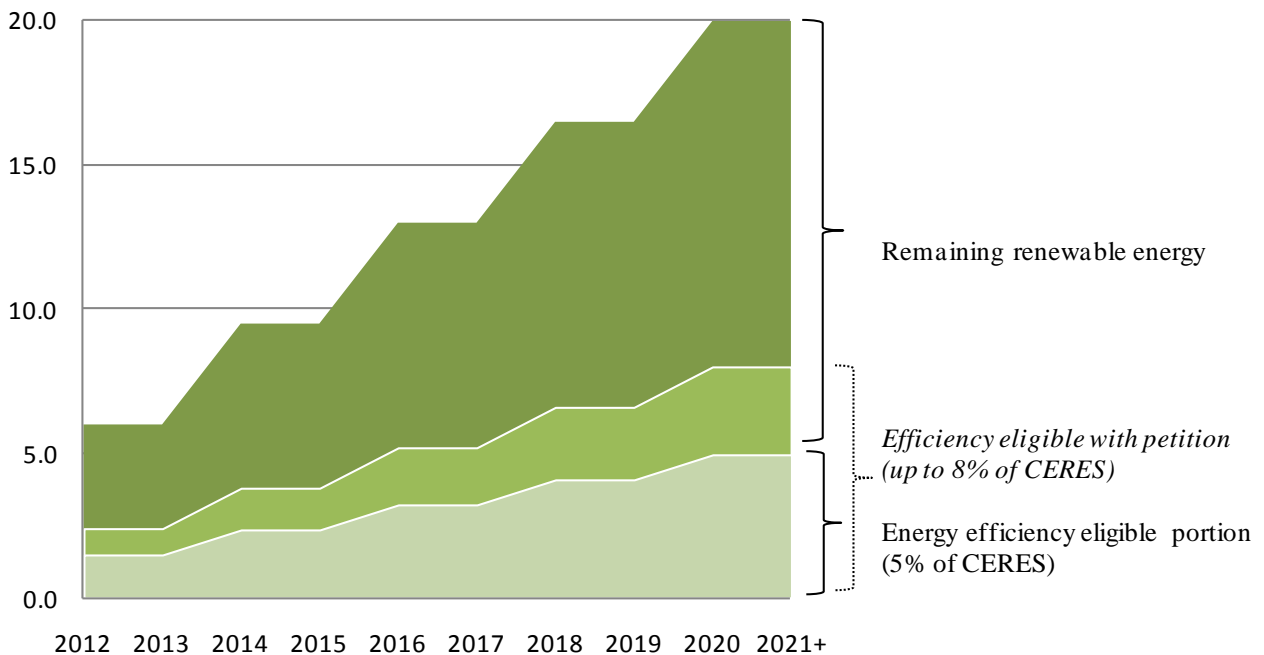


SUMMARY OF THE AMERICAN CLEAN ENERGY AND SECURITY ACT OF 2009 (H.R. 2454) AS REPORTED BY THE HOUSE ENERGY AND COMMERCE COMMITTEE ON MAY 21, 2009

RELEVANT PROVISIONS FOR ELECTRIC ENERGY EFFICIENCY - OVERVIEW

H.R. 2454 (the Waxman-Markey bill) contains a number of significant energy efficiency components. The main difference in the current draft vs. the discussion draft is that a standalone energy efficiency resource standard (EERS) has been dropped and energy efficiency is now part of the renewable energy standard (RES). The RES starts at 6% in 2012 and increases to 20% of total MWh sales (excluding resale) in 2020. As shown below, the combined efficiency and renewable electricity standard (CERES) allows for efficiency to account for 25% of the RES (or 5% of the 20%). State Governors can petition for up to 40% of the RES with energy efficiency (8% of the 20%) by submitting a petition to FERC.



CERES Requirements as Percentage of Retail Sales

The current draft counts electricity savings relative to business as usual (BAU) projections for efficiency measures that are employed after the date of enactment (January 1, 2012). Sources of savings include: customer facility savings; reductions in distribution system losses; CHP savings; and fuel cell savings. Importantly – existing energy efficiency measures and savings are excluded and energy savings due to codes and standards are excluded.

The schedule by year is provided below.

Table 1. Combined efficiency and renewable energy standard percentages in Waxman Markey draft (May 15)

Year	Required Annual Percentage	EE 5%	EE 8%
2012	6.0	1.5	2.4
2013	6.0	1.5	2.4
2014	9.5	2.4	3.8
2015	9.5	2.4	3.8
2016	13.0	3.3	5.2
2017	13.0	3.3	5.2
2018	16.5	4.1	6.6
2019	16.5	4.1	6.6
2020	20.0	5.0	8
2021+	20.0	5.0	8

TITLE I – CLEAN ENERGY

SUBTITLE A - COMBINED EFFICIENCY AND RENEWABLE ELECTRICITY STANDARD

- Defines energy savings measures to include savings through customer facility savings combined heat and power (CHP), reductions in distribution system losses, and fuel cell savings.
- What’s excluded in current draft?
 - does not include savings achieved through codes and standards;
 - does not include improvements in transmission system efficiency.
 - defines eligible measures as those that are implemented after the date of enactment ignoring the over 70 billion kWh in savings currently achieved by utilities.
- Defines ‘total annual electricity savings’ as those achieved in a specified year from measures that were placed into service after the date of enactment, accounting for the lifetimes of the measures and attrition rates (in MWh).
- A governor of any state (and the mayor of Washington, DC) may petition the FERC to increase the energy efficiency proportion of the CERES to up to two-fifths of the total requirement (8% of the 20% in 2020).
- FERC will prescribe standards and protocols for defining and measuring electricity savings, and will specify the types of eligible EE measures. EE savings must:
 - account for the useful life of the measures,
 - allow for savings to be estimated based on extrapolation from a representative sample of participating customers,
 - include procedures for counting CHP, recycled energy savings, and fuel cell savings

- ensure that the retail electric supplier played a significant role in achieving those savings
- include savings from programs administered by a retail electric supplier that are funded by state, federal and other sources. For those states with one or more administrators of ratepayer-funded EE programs, distribute the electricity savings equitably among retail electric suppliers.
- Establishes standards for third-party verification of savings, including requirements for accreditation of third-party verifiers to ensure that there is no conflict of interest.
- Allows for bilateral contracts for savings transfers between retail electric suppliers, given that both suppliers are in the same state.
- FERC will receive and evaluate all state applications for eligible electricity savings, but a state may request to use alternative measurement and verification procedures from those prescribed by FERC.
- Retail electric suppliers may pay alternative compliance payments of \$25/MWh (or \$0.025 per kWh) in lieu of each Federal renewable electricity credit that would otherwise be due. These payments will go directly to the state in which the utility is located and the funds may only be used for renewable energy deployment or cost-effective EE.
- States have the option of enacting more stringent CERES goals. Currently 19 states have energy efficiency resource standards, 28 states plus the District of Columbia have renewable portfolio standards, and 5 have renewable energy goals. Of those with an RPS, 12 are more stringent than the proposed federal standard and 5 are equivalent.

SUBTITLE D – STATE ENERGY AND ENVIRONMENTAL DEVELOPMENT (SEED) ACCOUNTS

- Section 131 authorizes DOE to establish a program under which a state, via its state energy office, may establish a State Energy and Environment Development (SEED) Account. A state may deposit into a SEED account Federal appropriations primarily for renewable energy and energy efficiency purposes, including funds for the Weatherization Assistance Program; the Low-Income Home Energy Assistance Program; grants under the Energy Policy and Conservation Act; State portions of Energy Efficiency and Conservation Block Grants; and the American Recovery and Reinvestment Act of 2009.

SUBTITLE E – SMART GRID ADVANCEMENT

- Assessment of Smart Grid Cost-Effectiveness in Products. Section 142 establishes that not later than one year after enactment, DOE and EPA will assess the potential for designating Smart Grid technologies to be integrated within Energy Star products. Within two years after enactment, DOE and EPA will conduct analysis of the potential energy savings, GHG emission reductions, and electrical cost savings that could accrue from each of the products referred for potential designation as Energy Star products to establish the “best case” Smart Grid analysis. If a product is found to be cost effective, then DOE and EPA, not later than three years from enactment, will inform the manufacturer and assess the benefits of

installing the products in the Energy Star program and options for informing consumers of this potential.

- Inclusion of Smart Grid Capability on Appliance EnergyGuide Labels. New Section 143 requires the FTC to initiate a rulemaking to determine if Smart Grid capabilities should be highlighted on EnergyGuide labels. The FTC has three years from the bill enactment to complete its rule.
- Smart Grid Peak Demand Reduction Goals. Section 144 provides that not later than one year from enactment, load-serving entities (LSEs) or states will determine and publish peak demand reduction goals for any LSEs serving more than 250 MW. However, FERC, in consultation with the DOE and the EPA, will develop a methodology for adjustments or normalization to an LSE's applicable baseline. FERC will support LSEs in developing peak demand reduction goals. DOE, in consultation with FERC, the EPA and the "National Electric Reliability Corporation" will develop a system and rules for measurement and verification of demand reductions. Goals must specify reduction/mitigation by a minimum percentage from the applicable baseline to a lower peak demand during year 2012. Additionally, greater reductions are required in 2015.

The provision includes a savings clause preserving existing state authority, which requires FERC-in consultation with states having peak management, demand response and distributed storage programs—to facilitate coordination between the federal program and such state programs to the maximum extent possible. Within one year from enactment, FERC will establish a public website for posting information demonstrating compliance—by states, regional entities, and LSEs—in meeting applicable peak demand reduction goals. Commencing in 2012, FERC will provide an annual report to Congress on compliance success and include appropriate recommendations for increasing peak demand reduction efforts. Provides for FERC to grant relief to LSEs for good cause.

- Reauthorization of Energy Efficiency Public Information Program to Include Smart Grid Information. Section 145 reauthorizes and funds the Energy Efficiency Public Information Program to include Smart Grid information. This section also amends the appliance rebate program pursuant to EAct 2005 to include smart capable appliances.
- Inclusion of Smart-Grid Features in Appliance Rebate Program. Section 146 allows Smart Grid capabilities of a product to be a part of the Energy Efficient and Smart Appliance Rebate Program established under EAct 2005.

TITLE II – ENERGY EFFICIENCY

In summary, Title II may make it more difficult for utility energy efficiency programs to achieve targets since retailers and distributors can receive bonus payments directly from DOE for selling energy efficient appliances and electronics. Traditionally, utilities have run appliance rebate programs directly or developed the relationship with distributors and retailers to provide incentives to carry more efficient products. Finally, the code improvements will impact savings achieved through utility programs. In addition, utilities will not receive credits for improvements in codes

and standards as Title I is currently written. As written, the current draft ignores the importance of creating an interface between utility energy efficiency programs and improved codes and standards.

SUBTITLE A - BUILDING ENERGY EFFICIENCY PROGRAMS

- Sections 201-204 address energy efficiency in building codes, building retrofits, manufactured homes, and building performance labels. The most significant provision is that this title mandates DOE to update building codes to realize a 30-percent improvement relative to 2004 or 2006 codes within 3 years of enactment (for residential buildings, the 2006 IECC, and for commercial buildings, ASHRAE Standard 90.1-2004), and a 50-percent reduction in energy use relative to the baseline code effective January 1, 2014 (residential buildings) and January 1, 2015 (commercial buildings) with 5 percent additional reductions every 3 years through 2029-2030.

Section 201 also requires DOE, within 3 years of bill enactment, to determine and adopt by rule what constitutes a violation of energy efficiency building codes and to decide on the penalties that would apply to violators. (*Matheson Amendment*)

- For retrofits, DOE will develop standards for national energy and environmental building retrofit policies. The Retrofit Energy and Environmental Performance (REEP) program will implement these policies using existing programs. State agencies may delegate performance of elements of the REEP program to other government agencies or to state regulated entities with priority to entities with existing comprehensive retrofit programs. The REEP program will be supported by use of emission allowances allocated to states.

SUBTITLE B - LIGHTING AND APPLIANCE ENERGY EFFICIENCY PROGRAMS

- Section 211 establishes a new standard for outdoor lighting fixtures as of 2011, with higher standards applied in 2013 and 2015. Creates new standards, starting in 2012, for portable light fixtures (e.g., table lamps). This means that new table lamps will have different sockets or will be pre-packaged with high efficiency light bulbs. Within 1 year of enactment, DOE must publish a final rule for certain incandescent reflector lamps (i.e., spotlights).
- Section 212 establishes, starting in 2012, standby energy usage levels for water dispensers, commercial hot food holding cabinets, and portable electric spas.
- Section 213 modifies the DOE rulemaking process for accepting consensus test procedures for any product covered by DOE energy efficiency regulations. Section 213 also requires DOE to update the energy efficiency test procedures for televisions within 12 months of enactment.

Further, section 213 modifies information to be requested by DOE from manufacturers to include information on the economic impact of proposed energy conservation standards and the manufacturers' annual shipments of each class of covered products organized by energy efficiency and energy use. Section 213 also modifies the procedure for a state to request a waiver from federal preemption of state energy efficiency standards.

- Section 213 continues, requiring the FTC, within 24 months of enactment, to revise appliance labeling policies, mandating “EnergyGuide” labels to show overall site and source CO₂ output of the appliance. Significantly, this section requires DOE to estimate the value of CO₂ and other greenhouse gas emissions reductions achieved by higher energy efficiency standards. This is significant because these values will be used by DOE in conducting lifecycle and net present value analysis to determine whether a standard should be made stricter.
- Section 214 requires DOE to create a “Best-In-Class Appliances Deployment Program” and to designate “best in class” product models of appliances, equipment, or electronics that are distinctly more energy efficient than average (comprising no more than 10 percent of the commercially available product models in a class). Importantly, DOE will provide bonus payments to retailers and distributors for sale of these models; provide bounties to retailers for replacement, retirement, or recycling of inefficient models; and provide premium awards to manufacturers for developing and producing of superefficient “best in class” products. This DOE program would directly compete with some of the existing utility-sponsored energy efficiency programs that target retailers, distributors, and/or manufacturers.
- Section 215 modifies the Energy Star program to establish a grading system for Energy Star products, with the most efficient products receiving an “A” grad and the least efficient Energy Star products receiving an “F” grade. (*Weiner Amendment*)

SUBTITLE D – INDUSTRIAL ENERGY EFFICIENCY PROGRAMS

- Directs DOE to support development of ANSI industrial energy efficiency certification standards and voluntary implementation of such standards by manufacturing firms by undertaking complementary activities through the Department of Energy’s Industry Technologies Program. To encourage use of innovative means of recovering thermal energy, establishes DOE financial awards to owners and operators of new and existing electric energy generation facilities or thermal energy production facilities using fossil or nuclear fuel.
- Section 244 requires DOE to study electric motors and the electric motors market in the United States and to create a commercial awareness program and authorizes DOE to establish a federal motor efficiency rebate program for fiscal years 2011 through 2015. (*Baldwin Amendment*)

SUBTITLE E – ENERGY SAVINGS PERFORMANCE CONTRACTS

- Section 251 establishes competition requirements for the use of an Energy Savings Performance Contract (ESPC). Revises section 203 of EAct 2005 (which mandates a renewable energy purchase requirement for the federal government) to allow electric energy or thermal energy to meet this requirement. Additionally, revises section 203 of EAct 2005 to provide that renewable energy produced on a federal facility on federal lands or on Indian lands will be calculated separately from renewable energy consumed for the purposes of compliance.

SUBTITLE F – PUBLIC INSTITUTIONS

- Generally authorizes DOE to make grants for efficiency and/or renewable programs to a variety of non-profit, community and low-income organizations.

SUBTITLE G – PRODUCT CARBON LABELING PROGRAM

- Requires EPA to conduct a study to determine the feasibility of creating a national program for the labeling of products and materials sold in the United States for their carbon content. As part of this report, EPA is required to evaluate the appropriate boundaries of the carbon lifecycle analysis for different sectors and products. Within 18 months of bill enactment, EPA is required to send a report to Congress. Within 3 years of bill enactment, EPA is required to establish a voluntary national product carbon disclosure program. Within 5 years of program establishment, EPA is required to report to Congress on the effectiveness and impact of the program. In this section, the terms “carbon content,” “carbon footprint,” and “carbon lifecycle” are defined. (*Baldwin Amendment*)

(ADDITIONAL) SUBTITLE G – NATIONAL ENERGY EFFICIENCY GOALS

- Requires DOE, in cooperation with EPA and other appropriate federal agencies, to develop a national plan to improve the overall energy productivity of the United States, measured in gross domestic product per unit of energy input, by at least 2.5 percent per year by 2012, and to maintain that rate of improvement through 2030. DOE is required to complete the plan within 1 year of bill enactment, and is required to update the plan every 2 years. (*Welch-DeGette Amendment*)

(ADDITIONAL) SUBTITLE G – ENERGY EFFICIENT INFORMATION AND COMMUNICATIONS TECHNOLOGIES

- Requires each federal agency to collaborate with the Office of Management and Budget (OMB) to create an implementation strategy, including best practices and measurement and verification techniques, for the purchase and use of energy efficiency information and communications technologies and practices. This section establishes that, wherever possible, existing standards and practices that have been or are being developed in open collaboration with broad stakeholder input/review should be incorporated. Also, provides that not later than 6 months from the date of enactment, OMB will establish performance goals. (*Eshoo Amendment*)

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