



HIGHLIGHTS: AMERICAN CLEAN ENERGY AND SECURITY ACT OF 2009 (H.R. 2454)

On June 26, 2009, the U.S. House of Representatives voted 219-212 to pass the American Clean Energy and Security Act of 2009. The summary below includes brief highlights of provisions in this historic bill, which comprises more than 1,300 pages. For the full text of the legislation, please visit: http://frwebgate.access.gpo.gov/cgi-bin/getdoc.cgi?dbname=111_cong_bills&docid=f:h2454eh.txt.pdf

CAP-AND-TRADE SYSTEM

- ***Cap and Trade (Title III)***: The bill establishes goals for reductions of U.S. greenhouse gas emissions and related caps on emissions from “covered entities,” which would be required to obtain tradable emission allowances for each ton of CO₂ (or equivalent) emitted in the prior year. The program targets increasing reductions in greenhouse gas emissions over time, starting with a 3% reduction below 2005 levels in 2012 and culminating in an 83% reduction below 2005 levels by 2050. Covered entities are defined specifically in the bill, and include retail electric utilities and oil refiners, among others.

The bill would preempt state cap and trade systems that encompass federally capped emissions emitted during 2012 through 2017, but such preemption would not extend to “a target or limit on greenhouse gas emissions adopted by a State or political subdivision that is implemented other than through the issuance and surrender of a limited number of tradable instruments in the nature of emission allowances, nor does it include any other standard, limit, regulation, or program to reduce greenhouse gas emissions that is not implemented through the issuance and surrender of a limited number of tradable instruments in the nature of emission allowances.”

NATIONAL ENERGY EFFICIENCY AND RENEWABLE ELECTRICITY STANDARD

- ***Combined Energy Efficiency and Renewable Electricity Standard (Sec. 101-102)***: The bill establishes a Combined Efficiency and Renewable Electricity Standard. Under the standard, retail electric suppliers selling at least 4 million megawatt hours of electricity to electricity consumers during the prior year would be required to derive an increasing percentage of their retail “base” from renewable sources or electricity savings—beginning with 6% in 2012 and reaching 20% by 2020 through 2039. Electric utilities could comply with the standard through a combination of renewable electricity and electricity savings (efficiency), provided that renewable electricity comprises no less than $\frac{3}{4}$ (75%) of the utility’s compliance with the applicable annual target. The governor of a state may petition for an increase of up to $\frac{2}{5}$ (40%) for the portion of the standard that may be met through efficiency for retail electric suppliers in a state. In lieu of submitting demonstrated electricity savings and renewable electricity credits, retail electric suppliers may comply with the standard in whole or part by submitting payments of \$25 for each renewable electricity credit (REC) or demonstrated megawatt hour of electricity savings required under the standard. The bill clarifies that states, localities, and tribes may establish and enforce their own renewable energy and energy efficiency standards or regulations, provided that these do not relieve individuals of any requirements provided for by the bill.

- **National Energy Efficiency Goals (Sec. 272)**: This section sets forth national energy efficiency goals to improve national energy productivity (GDP/unit of energy input) by at least 2.5% per year by 2012 and for each year thereafter through 2030. Within a year of the bill's enactment, the Secretary of Energy, in cooperation with the EPA Administrator and the heads of other federal agencies, must develop a strategic plan for achieving these national goals.

BUILDING ENERGY EFFICIENCY AND GREEN BUILDING

- **Building Retrofit Program (REEP) (Sec. 202)**: The bill directs the EPA Administrator, in consultation with the Secretary of Energy, to develop standards for national energy and environmental retrofitting policies for residential and nonresidential buildings, to be implemented through programs collectively known as the Retrofit for Energy and Environmental Performance (REEP) program. The Administrator and Secretary are directed to use existing programs in creating and operating REEP, and to coordinate with the Secretary of HUD in carrying out the program to retrofit assisted and public housing.

Under the program, emission allowances would be provided to States that have adopted the relevant program standards, including certification and training requirements for auditors, inspectors, raters, and contractors, and post-retrofit inspection standards for buildings. States could use allowances to implement the REEP program in a variety of ways, including through funding of prescriptive and performance-based retrofit programs, credit enhancements, capital for public revolving loan funds, utility-operated retrofit programs, and REEP services offered through local government programs.

States (or their designees) could administer incentives (up to 50% of total retrofit costs, prorated for multi-unit buildings) to owners of residential buildings or units who achieve a more than 10% reduction in building energy use and owners of nonresidential units or buildings who achieve at least a 20% reduction through retrofitting measures. Increased incentives would be available for achievement of higher levels of energy efficiency. States could offer additional incentives for demonstrated improvements in water efficiency, among other environmental attributes. The bill prescribes per-unit limits on direct expenditures that state or local REEP programs can make using allowance funds or proceeds from them. Historic buildings in or eligible for the National Register of Historic Places are eligible for awards of up to 120% of the specified limits.

States receiving REEP funds must agree to make at least 10% of the allowance value received through the Act for REEP available on a preferential basis for retrofits of public and assisted housing.

The bill authorizes \$50 million to the Administrator and \$20 million to the Secretary for program administration for each of the fiscal years 2010 through 2013.

- **Building Energy Performance Labeling Program (Sec. 204)**: The bill directs the EPA Administrator to create a building energy performance labeling program to “enable and encourage knowledge about building energy performance by owners and occupants and to inform efforts to reduce energy consumption nationwide.” In developing the program, the Administrator is directed to consider existing programs (including Energy Star, the Home Energy Rating System (HERS) Index, and Department of Energy programs), establish

measurement protocols for evaluating building energy performance, create model performance labels for residential and commercial buildings, and use incentives and other means to spur use of the labels by the public and private sectors. The program is limited in application to new construction beginning after the date of the bill's enactment.

Along with improvements to federal energy databases, the model labeling program is to be refined through various demonstration projects. The model labeling program will be made available for voluntary adoption by states, which could become eligible to use allowance funding for implementation by adopting labeling programs consistent with the model. At the federal level, DOE and EPA are directed to use the labeling program to evaluate the energy performance of their facilities and to encourage similar efforts in other federal agencies. The legislation also provides for the creation of a business and consumer education program related to building energy efficiency and the labeling program.

The bill authorizes for implementation by the Administrator \$50 million for each of the fiscal years 2010 through 2020, and for implementation by the Secretary \$20 million for fiscal year 2010 and \$10 million for fiscal years 2011 through 2020.

- **Greater Efficiency in Building Codes (Sec. 201)**: The bill establishes the following percentage targets for energy use reductions in new residential and commercial buildings nationally as compared to baseline codes (2006 IECC and ASHRAE 90.1-2004):
 - 30%, effective on the enactment of ACES;
 - 50%, effective 1/1/2014 for residential buildings, and 1/1/2015 for commercial buildings; and
 - 5% additional, effective 1/1/2017 for residential buildings, and 1/1/2018 for commercial buildings, and every three years thereafter, through 1/1/2029 and 1/1/2030, respectively.

The bill directs the Secretary of Energy to either identify existing codes or establish national energy efficiency building codes for residential and commercial buildings that are sufficient to meet these targets.

Following the identification or establishment of national energy efficiency building codes by the Secretary, states would be required to review and update their building code provisions and certify that their provisions meet or exceed the targets. A state that adopts California's Title 24-2009 within 27 months after enactment of ACES is considered to meet the initial 30% reduction target for residential buildings. If a State (or local government) has not had a certification accepted by the Secretary within 18 months of the Secretary's establishing or identifying a national code, the national code will be the applicable building energy efficiency code for that jurisdiction.

Within 2 years of a state's certification regarding its code provisions or the application of the national code by default, each state would have to certify that it has achieved "compliance," or, for certifications submitted during the first 7 years following enactment, is achieving "significant progress," as defined in the bill. If determined to be out of compliance with the applicable code, states could become ineligible to receive funding under the bill (in increasing percentages) as well as allowance allocations.

The federal government could step in to enforce a state or local code or the national energy efficiency code where a state or local government failed to do so. “A State or locality that enforces building codes may assume responsibility for enforcing the national energy efficiency building code by notifying the Secretary to that effect....”

Violations of codes are to be determined in accordance with the provisions of the relevant state/local law for jurisdictions where a state or local code is in effect or where a state has submitted a notice of intent to enforce the national energy efficiency code. Violations will be determined by the Secretary for those jurisdictions where the national energy efficiency code has been made applicable (except for those states and localities that have submitted a notice of intent to enforce the national code).

Allowance funds would be provided to states to support the implementation and enforcement of the updated codes. Additionally, the bill authorizes for use by the Secretary \$25 million and such sums as necessary for each of the fiscal years 2010 through 2020 for enforcement of the national energy efficiency code.

- **Community Building Code Administration Grants (Sec. 207)**: The bill establishes a new competitive grant program to provide grants of up to \$1 million to local building code enforcement departments to assist in code administration and enforcement. Grant recipients must comply with matching requirements set forth in the bill, and each department receiving a grant must “empanel a code administration and enforcement team consisting of at least 1 full-time building code enforcement officer, a city planner, and a health planner or similar officer.” The bill authorizes \$20 million for each of the fiscal years 2010 through 2014 for the program.
- **Green Resources for Energy Efficient Neighborhoods (GREEN) Act (Secs. 281-299)**: The bill includes a host of provisions related to residential energy efficiency, including minimum energy efficiency standards for HUD-owned and assisted housing; promotion of location- and energy-efficient mortgages and solar leasing; energy efficiency demonstration projects for HUD-assisted multi-family housing projects; and a residential energy efficiency block grant program; among others. For a full summary of the GREEN Act, which was introduced in the House as a standalone bill (H.R. 2336) prior to its inclusion in H.R. 2454, please visit: <http://perlmutter.house.gov/PRArticle.aspx?NewsID=771>.
- **Energy Efficiency in Manufactured Housing (Sec. 203)**: This section is designed to help low-income families residing in mobile homes to save both energy and related costs through financial support for the purchase of new Energy Star qualified manufactured homes. Under the program, states would be provided allowances through their SEED accounts to provide rebates to owners of pre-1976 manufactured homes. Homes for which rebates are issued are to be dismantled (and appropriately recycled) and replaced with Energy Star versions. To be eligible for the rebate, an owner’s total household income cannot exceed 200% of the federal poverty level for the applicable area. Rebates cannot exceed \$7,500 per home from any value derived through allowances provided under the Act. States can, however, supplement rebate amounts with state or other funds. The federal government is directed to coordinate efforts with similar programs, including the Weatherization Assistance Program and State Energy Program.

PRODUCTS AND APPLIANCES

- **WaterSense and Water-Efficient Product Incentive Programs (Secs. 215-217)**: The bill provides legislative authorization for the establishment of a WaterSense program within EPA to promote water efficiency through voluntary labeling of water-efficient products, as well as funding for an incentive program for use of residential water-efficient products by consumers, to be administered through states or other eligible entities. The bill further states that to meet requirements for water-consuming products, heads of federal agencies must procure either WaterSense products or services, or those designed by the Federal Energy Management Program (FEMP).

The bill authorizes for EPA's administration of the WaterSense program \$7.5 million for 2010; \$10 million for 2011; \$20 million for 2012; and \$50 million for 2013 and for each year thereafter.

The bill authorizes for EPA's administration of the incentive programs \$50 million for the rebate program for fiscal year 2010; \$100 million for FY2011; \$150 million for FY2012; \$100 million for FY2013; and \$50 million for FY2014.

- **Best in Class Appliances Deployment Program (Sec. 214)**: Within 1 year of the bill's enactment, the Secretary of Energy, in consultation with the EPA Administrator, must establish and administer a program known as the Best-in-Class Appliances Deployment program to provide: bonuses to retailers for increasing sales of best-in-class products, bounties for retailers and manufacturers for recycling and replacement of inefficient equipment, and premium awards for manufacturers developing new, super-efficient equipment. Best-in-Class refers to the top 10% most efficient products in a group of commercially available product models. The bill authorizes \$600 million to the Secretary for each of the fiscal years 2011 through 2013 and such sums as necessary thereafter.
- **Energy Star Standards (Sec. 219)**: The bill authorizes \$5 million for FY 2010 and each fiscal year thereafter for the Energy Star program to support the continued review of Energy Star standards.
- **Product Carbon Disclosure Program (Sec. 274)**: The bill directs the EPA Administrator to conduct a feasibility study and report to Congress within 18 months of the bill's enactment regarding the establishment of a national initiative "for measuring, reporting, publicly disclosing, and labeling products or materials sold in the United States for their carbon content..." Within 36 months of the bill's enactment and following the above feasibility study, the Administrator must establish a voluntary national product carbon disclosure program, "which may involve a product carbon label with broad applicability to the wholesale and consumer markets...." The bill authorizes \$5 million for the feasibility study and \$25 million for each of the fiscal years 2010 through 2025 for the national product carbon disclosure program.
- **Lighting and Appliance Efficiency (Secs. 211-213)**: The bill includes new lighting efficiency standards and other appliance standards. Additionally, section 213 amends the Energy Policy and Conservation Act to permit states to adopt building codes that meet at least one of the following requirements as to treatment of appliance efficiency:

“(i) The code does not require that the covered product have an energy efficiency exceeding—

- (I) the applicable energy conservation standard [];
- (II) the level required by a regulation of that State for which the Secretary has issued a rule granting a waiver...; or
- (III) the required level established in the International Energy Conservation Code or in a standard of the American Society of Heating, Refrigerating and Air-Conditioning Engineers, or by the Secretary...

(ii) If the code uses one or more baseline building designs against which all submitted building designs are to be evaluated and such baseline building designs contain a covered product subject to an energy conservation standard ... the baseline building designs are based on an efficiency level for such covered product which meets but does not exceed one of the levels specified in clause (i).

(iii) If the code sets forth one or more optional combinations of items which meet the energy consumption or conservation objective, in at least one combination that the State has found to be reasonably achievable using commercially available technologies the efficiency of the covered product meets but does not exceed one of the levels specified in clause (i).”

The bill specifies that if a building code requires the use of covered products with efficiency levels or requirements exceeding those above, these requirements will not be applicable unless the Secretary has issued a waiver. The bill also modifies the provision on federal preemption to state that the Secretary cannot deny a state’s petition for a waiver based on the state’s failure to produce confidential information from a manufacturer, distributor, or related association that the state does not have a legal right to obtain.

STATES

- **State Energy and Environment Development (SEED) Funds (Sec. 131-132):** The bill charges the EPA Administrator with creating a program under which a state can maintain a State Energy and Environment Development (SEED) Fund “to serve as a common State-level repository for managing and accounting for emission allowances provided to States designated for renewable energy and energy efficiency purposes.” States with a SEED account are to prepare annual plans detailing intended uses of funds in their SEED accounts.

For the years 2012 to 2050, the federal government will allocate allowances from the cap-and-trade program to SEED funds, with 1/3 of the allowances going equally among the states; 1/3 in proportion to state population; and the 1/3 in proportion to each state’s energy consumption.

Allowances are to be used by states as follows:

- At least 12.5% for use by local governments to support energy efficiency and renewable energy programs in the Act;

- At least 20% exclusively for energy efficiency under the Act, including for implementation of the provisions related building energy codes, energy efficient manufactured homes, the building energy performance labeling program, the Retrofit for Energy and Environmental Performance (REEP) program, and low-income community energy efficiency programs, provided that at least 5.5% be used exclusively for implementation of the REEP program, and at least 1% be used for low-income community energy efficiency programs consistent with the grant program established by the Act;
- At least 20% exclusively for grants, tax credits, and other incentives for retooling, expansion, or creation of manufacturing facilities that produce renewable energy or electricity storage systems; for deployment of renewable energy technologies; or for deployment of equipment or buildings that generate energy from renewable sources; and
- the remainder for any of the following: energy efficiency uses described above; described renewable energy purposes; energy efficiency programs for end-use consumers; development of a Smart Grid for public buildings and facilities; and support for the non-federal share for certain surface transportation projects, provided that not more than 10% of allowances distributed consistent with this section may be used for such transportation purposes.

FEDERAL GOVERNMENT

- **Federal Renewable Energy Purchases (Sec. 103)**: The bill establishes a renewable energy requirement for the federal government, directing the President to ensure that the total amount of electricity consumed by federal agencies reflects an increasing percentage of renewable electricity, beginning with 6% annually in 2012 and reaching 20% annually by 2020 through 2039. The bill provides that the federal government may enter contracts for acquisition of electricity from renewable energy for periods of up to 20 years. The bill directs the Secretary of Energy, through the Federal Energy Management Program (FEMP), to publish, within 90 days of this provision’s enactment, a standard renewable energy purchase agreement for use by federal agencies.
- **Federal Energy Savings Performance Contracts (Sec. 251)**: The bill establishes competitive bidding requirements for the federal Energy Savings Performance Contract (ESPC) program.
- **Net Metering for Federal Agencies (Sec. 152)**: The bill directs electric utilities that sold more than 4 million megawatt hours of electricity to consumers in the preceding year “to offer to arrange (either directly or through a third party) to make interconnection and net metering available to Federal Government agencies, offices, or facilities....”

GREEN JOB TRAINING AND DEVELOPMENT

- **Green Job Training (Sec. 422)**: The bill increases funding authorization for the Energy Efficiency and Renewable Energy Worker Training Program (authorized by the Green Jobs

Act within the Energy Independence and Security Act of 2007) from \$125 million to \$150 million.

- **Green Construction Careers Demonstration Project (Sec. 424A)**: The bill directs the Secretary of Labor, in consultation with the Secretary of Energy, to establish a Green Construction Careers demonstration project “to promote middle class careers and quality employment practices in the green construction sector among targeted workers and to advance efficiency and performance on construction projects related to this Act.”
- **Clearinghouse for Vocational Education and Job Training in Renewable Energy Sectors (Sec. 423)**: The bill directs the Secretary of Labor, in collaboration with the Secretaries of Energy and Education, to establish a publicly-available, Web-based information and resources clearinghouse to assist career and technical education and job training in the renewable energy sector. In compiling the clearinghouse, the Secretary will draw on the information and expertise of businesses and organizations in the renewable energy sector, and educational institutions.
- **Clean Energy Curriculum Development Grants (Sec. 421)**: The bill authorizes the Secretary of Education to award competitive grants to partnerships for the creation of curricula “focused on emerging careers and jobs in the fields of clean energy, renewable energy, energy efficiency, and climate change mitigation, and climate change adaptation.”
- **Low Income Community Energy Efficiency Program (Sec. 264)**: The bill authorizes \$50 million for each of the fiscal years 2010 through 2015 for a competitive grant program, to be administered by the Secretary of Energy, to provide grants to nonprofit community development organizations to promote energy conservation, job training and business opportunities, and development of alternative and renewable energy supplies for low-income communities and residents.

INVESTMENT IN CLEAN ENERGY DEPLOYMENT, ENERGY EFFICIENCY, AND RESEARCH

- **Clean Energy Development Administration and Fund (CEDA) (Secs. 184-190)**: The bill establishes a Clean Energy Deployment Administration (CEDA) (Sec. 186) to develop a methodology for assessing clean energy technologies and encouraging their commercial scale deployment, and to advise on approaches for meeting energy technology deployment goals (Sec. 185). The bill provides the Administrator of the CEDA with broad authority to provide direct and indirect support for clean energy technologies, including through the provision of loans, loan guarantees, and letters of credit, provided that no one technology receives more than 30% of available funds. The bill establishes a Clean Energy Investment Fund (Sec. 184) for use by the CEDA Administrator for such purposes.
- **Energy Innovation Hubs and Building Assessment Centers (Secs. 171-174)**: The bill directs the Secretary to provide funding to higher education institutions for Building Assessment Centers (Sec. 173) to promote opportunities for building efficiency, including research and training, and promotion of “high-efficiency building construction techniques and materials options.” The bill also establishes a program to create and support Energy Innovation Hubs to promote commercial application of clean energy technologies (Sec. 171), as well as an initiative establishing “not more than 10 regional Centers for Energy and Environmental Knowledge and Outreach [Sec. 174] at institutions of higher education to

coordinate with and advise industrial research and assessment centers, Building Assessment Centers, and Clean Energy Application Centers located in the region....”

- **Clean Technology Business Competition Grant Program (Sec. 196)**: The bill authorizes \$20 million for use by the Secretary of Energy to provide grants to nonprofit organizations “to conduct business competitions that provide incentives, training, and mentorship to entrepreneurs and early stage start-up companies ... to meet high priority economic, environmental, and energy security goals in areas to include energy efficiency, renewable energy, air quality, water quality and conservation, transportation, smart grid, green building, and waste management.”
- **Consumer Behavior Research Study (Sec. 265)**: The bill authorizes the Secretary of Energy to establish a research program on consumer actions related to energy conservation and energy efficiency. The Secretary will award competitive grants to higher education institutions to undertake such research.
- **Energy Sustainability and Efficiency Grants and Loans for Institutions (Sec. 261)**: The bill amends the Energy Policy and Conservation Act to clarify that Indian tribes, nonprofit hospitals, and nonprofit inpatient health care facilities are eligible for funding under the Energy Sustainability and Efficiency Grants and Loans for Institutions program, and increases the maximum allowable amount for certain grants.
- **Clean Energy Manufacturing Revolving Loan Fund Program (Sec. 246)**: The bill establishes a revolving loan fund program to boost job creation and domestic manufacturing capacity. Under the program, the federal government will provide grants to states to establish revolving loan funds to support manufacturers in their efforts to reduce the energy intensity or greenhouse gas emissions of a U.S. manufacturing facility, or to retool, expand, or create manufacturing facilities that produce clean energy and energy efficient products. The bill authorizes \$15 billion for the program for each of the fiscal years 2010 and 2011.

TRANSPORTATION

- **Clean Transportation (Secs. 121-125; 222-223)**: The bill requires that electric utilities create plans for developing the infrastructure to support plug-in electric drive vehicles. (Sec. 121). The bill also authorizes financial assistance programs to support the manufacture of electric vehicles as well as their integration into electricity grids. Funding for such programs will come in part through allowance allocations.

The bill directs the EPA Administrator, in consultation with the Secretary of Transportation, to promulgate regulations to establish national goals for reductions in transportation-related greenhouse gas emissions and related models and methodologies. (Sec. 222). The bill provides that, within 1 year after final rules are promulgated under the relevant section of the Clean Air Act, each metropolitan planning organization must develop as part of its transportation planning process reduction targets for surface-transportation related emissions. The bill also establishes a SmartWay Transport Program, to be administered by EPA, to promote use of strategies and technologies that reduce emissions, pollution, and fuel consumption. (Sec. 223).

SMART GRID AND TRANSMISSION PLANNING

- **Smart Grid (Secs. 142-145):** The bill directs DOE and EPA to consider including smart grid capability as part of their labeling efforts under Energy Star, and to analyze potential energy and cost savings and emissions reductions that could result from designation of these products. (Sec. 142). The bill directs the Federal Trade Commission, within 1 year of the provision's enactment, to consider prominently noting a product's smart grid capability on Energy Guide Labels. (Sec. 143). Within 1 year of enactment of the section, "each load-serving entity, or, at the option of the State, each State with respect to load-serving entities that the State regulates, shall determine and publish peak demand reduction goals for any load-serving entities that have an applicable baseline in excess of 250 megawatts." (Sec. 144). The bill also establishes as a federal policy the promotion of regional electricity grid planning that facilitates renewable and low- and zero-carbon energy sources for electricity generation, and provides for the establishment of national electricity grid planning principles.