111th Congress, sponsored by Reps. Waxman and Markey
Bill as passed by the U.S. House of Representatives, June 26, 2009 (summary updated July 17, 2009)

Note: Not all subtitles and sections of the Act are included here, only those with provisions creating, limiting, or otherwise affecting a role for states. Footnotes indicate amendments added during committee or floor markup. Changes made since committee markup are colored in blue.

Summary
The ACES Act establishes a combined efficiency and renewable electricity standard (ERES), develops a strategy for promoting carbon capture and sequestration (CCS), places performance standards on new coal-fired power plants, supports state and local adoption of advanced building codes, supports state building retrofit programs, instructs states to submit goals for transportation-related GHG emissions reductions, establishes a cap-and-trade program covering multiple greenhouse gases (GHGs) and sectors, and establishes a National Climate Change Adaptation Strategy.

Of particular interest to states:
• **Preemption.** State cap-and-trade programs are preempted for the years 2012-2017. Other state or regional energy and greenhouse gas programs (including state renewable electricity and efficiency standards) are not affected. The U.S. EPA’s use of some Clean Air Act programs is restricted.
• **Allocation to states.**
  o At the beginning of the cap-and-trade program, states will receive 9.5% of federal allowances for investments in renewable energy and energy efficiency (decreasing over time and holding at 4.5% after 2021). States will initially receive 1.875% of allowances for programs to benefit users of home heating oil and propane, declining to 0.3% in 2029.
  o Allowances are made available to states for other purposes (including 0.5% for building efficiency codes, an initial 0.9% for domestic adaptation programs, and an initial 0.385% for natural resources adaptation), if eligibility requirements are met. Unlike other purposes, allocations for adaptation increase over time.
  o Other allowances not directly allocated to states will benefit state residents and entities, including allocations to benefit electricity and natural-gas rate payers, rebates for trade-vulnerable industries, and tax rebates for low-income households.
• **Treatment of state/regional allowances.** Holders of allowances issued by California, the Regional Greenhouse Gas Initiative (RGGI) or the Western Climate Initiative (WCI) may exchange these for federal allowances, although not necessarily at a one-for-one ratio.
• **Other funds for states.** Funds raised through the federal ERES are given directly to states for use in renewable energy and energy efficiency programs.

Some key changes since committee markup:
• Central procurement states added to RES (p. 2)
• Federal authority for interstate transmission facility permits modified (pp. 4-5)
• Residential energy efficiency block grant program and clean energy manufacturing and renewable energy loan programs created (pp. 7, 8)
• Modifications made to allowance allocation (pp. 9, 10, 12)
• Allowance exchange for early action offset credits added (p. 11)

Prepared by Kate Zyla and Gabriel Pacyniak. Please contact Kate (zyla@law.georgetown.edu) with any questions or comments.
• National Climate Change Adaptation Program replaced with interagency committee; National Climate Service provisions expanded (p. 12)
Title I – Clean Energy
Subtitle A: Combined Efficiency and Renewable Electricity Standard (ERES)
(Sec. 101.) This subtitle establishes a combined Efficiency and Renewable Electricity Standard\(^1\) (6% of each retailer’s electric supply by 2012 and 20% by 2020\(^2\)), with at least three quarters of that coming from renewable electricity rather than efficiency. In setting up the program, the Federal Energy Regulatory Commission (FERC) is instructed to preserve the integrity and incorporate best practices of existing state renewable energy (RE) programs; rely on existing and emerging state or regional tracking systems for renewable electricity credits (RECs); and cooperate with states to coordinate between state and federal RE programs, and minimize administrative burdens and costs to retail electric suppliers.

State petition. Governors (and the Mayor of the District of Columbia) may petition:

- to increase the proportion of combined targets that may be met through electricity savings (rather than renewable generation) within the state from one quarter to up to two fifths.
- for delegation to the state of the authority to review and verify reported electricity savings for compliance with the ERES.

Alternative compliance payments. In lieu of submitting a REC or demonstrating electricity savings, a retailer may pay $25 per MWh (adjusted for inflation). These payments shall be made directly to the state in which the retailer is located, with payments deposited directly into a fund within the state’s treasury and exclusively used for deploying renewable energy technologies or energy efficiency measures.\(^3\)

Savings provisions. Nothing in this section affects the authority of a state (or political subdivision of a state) to:

- Adopt or enforce any law or regulation regarding renewable electricity, including programs that exceed the requirements of this RES (provided that the law doesn’t negate obligations under the federal program); or
- Regulate the use of federal RECs by electricity suppliers within their jurisdiction.

Central procurement states.\(^4\) States that already require retail electric suppliers to collect payments from electricity ratepayers to be used for central procurement of renewable energy credits, and that have assumed responsibility for compliance with the RES on behalf of electricity retailers in their states, shall be issued federal RECs for these credits.\(^5\)

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\(^1\) Renewable energy resources are defined as wind energy, solar energy, geothermal energy, renewable biomass, biogas derived exclusively from renewable biomass, biofuels derived exclusively from renewable biomass, “qualified hydropower”, and marine and hydrokinetic renewable energy (as defined in the Energy Independence and Security Act of 2007). Distributed renewable generation receives three RECs per MWh instead of one.

\(^2\) The electricity baseline does not include electricity generated by a hydropower facility that is not “qualified hydropower,” nuclear power units placed in service after enactment of this section, or the proportion of fossil-fueled generated electricity whose emissions are captured and sequestered.

\(^3\) A central procurement state (see above) that has assumed responsibility for compliance with the RES and opts to submit alternative compliance payments must certify that such payments are the lowest cost method of meeting the RES and that the funds are in addition to any money the state would otherwise spend for these purposes. The state must deposit alternative compliance payments in a unique fund in the state treasury and must also certify that it has maximized the level of deployment of renewable electricity generation and electricity savings per dollar achieved through such expenditures.

\(^4\) Added by Manager’s amendment, June 26.

\(^5\) If a central procurement state fails to satisfy its obligations for any year, the state’s assumption of responsibility for the RES shall be discontinued immediately, and retail electric suppliers in the state will be subject to the requirements of the RES.
Clarification of state authority regarding feed-in tariffs. (Sec. 102.) A State legislature or regulatory authority may set the rates for a sale of electricity by a facility generating electric energy from renewable energy sources pursuant to a state-approved production incentive program (including a requirement that an electric utility purchase renewable energy at a specified rate).

Subtitle B: Carbon Capture and Sequestration (CCS)
Subtitle B instructs the Environmental Protection Agency (EPA) to create a national strategy for CCS and a coordinated approach to the certification and permitting of geologic sequestration sites. It creates a program for demonstration and deployment of CCS technologies, distributes allowances to support commercial deployment of CCS technologies, and sets performance standards for emissions from new coal-fired power plants.

National strategy. (Sec. 111.) EPA, the Department of Energy (DOE), and other relevant agencies will submit a report to Congress within 120 days identifying key legal and regulatory barriers and implementation challenges to the commercial-scale deployment of CCS, including those that can be addressed by a federal agency and those that would best be addressed at the state or regional level.

Task force. (Sec. 113.) The EPA will establish a task force composed of subject matter experts, environmental NGOs, environmental law academics, state environmental officials, representatives of state attorneys general, and members of the private sector to study federal and state statutes and state common law regarding geologic sequestration of CO₂.

Carbon Storage Research Corporation. (Sec. 114.) Fossil-fuel-based distribution utilities may vote to establish a corporation to accelerate the commercial availability of CCS technology and methods, unless opposed by 40 or more percent of state regulatory authorities.

Subtitle C: Clean Transportation

Electric vehicle infrastructure. (Sec. 121.) Each electric utility shall develop a plan to support the use of plug-in hybrid electric vehicles (PHEVs) and electric vehicles (EVs), including elements that the state determines necessary to support EVs and PHEVs. Each state regulatory authority (and non-regulated utility) shall:

- Require that charging infrastructure work with products of all auto manufacturers to the extent possible;
- Consider adopting minimum requirements for deployment of charging infrastructure (and other appropriate requirements necessary to support PHEVs and EVs);
- Consider whether and to what extent to allow cost recovery for plans and implementation;
- Establish any protocols and standards for integrating PHEVs and EVs into an electrical distribution system, including Smart Grid systems;
- Include the ability for each PHEV and EV to be identified individually and to be associated with its owner’s electric utility account regardless of the location that the vehicle is plugged in; and
- Determine whether time-of-use pricing should be employed to enable the use of PHEVs and EVs to contribute to meeting peak-load power needs.

Large-scale vehicle electrification program. (Sec. 122.) DOE shall establish a program to provide financial assistance for deploying and integrating plug-in EVs in multiple regions, based on applications received from states, local governments, or groups of states or local governments.

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6 Amendment accepted by Energy and Commerce Committee, May 19, proposed by Rep. Kathy Castor (D-Fla.).
Subtitle D: State Energy and Environment Development (SEED) Funds

(Sec. 131.) EPA\(^7\) is instructed to establish a program under which a state, through its state energy office, may create a SEED Fund for managing and accounting for federal financial assistance to states designated primarily for clean energy, energy efficiency, and climate change purposes.

- All emissions allowances received by states for renewable energy and energy efficiency purposes (initially 9.5% of allowances, plus 0.5% for states with complying building codes) shall be deposited into states’ SEED accounts.

- Each state administering a SEED account shall prepare an annual plan identifying the intended uses of the allowances or proceeds from the sale of allowances in its SEED account.

- Each state administering a SEED account shall report every 2 years on its activities related to the account.

Support of state renewable energy and energy efficiency programs. (Sec. 132.) Cap-and-trade emissions allowances given to states for renewable energy and energy efficiency programs (deposited in and administered through SEED accounts) will be distributed according to the following formula:

- One third divided equally among states;
- One third distributed among states according to population; and
- One third distributed among states according to energy consumption.

Minimum percentages of SEED allowances to be used for various purposes (including building codes and retrofits, energy-efficiency manufactured homes, energy performance labeling, and transportation planning, as described in other sections of the Act) are specified. States are also instructed to distribute a minimum of 12.5% of these allowances to local governments for these same purposes.

Subtitle E: Smart Grid Advancement

Smart grid peak demand reduction goals. (Sec. 144.) Within a year after enactment, load-serving entities (LSEs) or states shall determine and publish peak-demand reduction goals (with targets for 2012 and additional reductions by 2015) for any LSEs with baseline loads\(^8\) exceeding 250 megawatts.

- Peak-demand reduction goals may be established for an individual LSE or, at the determination of a state or regional entity, for a larger region.

- Any costs incurred by states for this purpose shall be supported by the use of emission allowances allocated to states’ SEED accounts (see allocation below).

Savings provisions. Nothing in this Act affects the authority of a state (or political subdivision of a state) to adopt or enforce any law or regulation respecting peak-load management, demand response, distributed storage, use of distributed generation, or the regulation of LSEs.

- The Federal Energy Regulatory Commission (FERC), in consultation with states having such programs, shall facilitate coordination between the federal and state programs.

Subtitle F: Transmission Planning

Interstate transmission facility permits.\(^9\) (Sec. 151.) The Act limits FERC’s existing federal backstop siting authority (under Sec. 216 of the Federal Power Act) to the Eastern interconnection and to interstate lines and intrastate segments that are integral to a proposed interstate line. In the Western interconnection, the change to EPA was made in the May 17 Amendment in the Nature of a Substitute.

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\(^7\) The original draft of the bill gave responsibility for this program to the Department of Energy. The change to EPA was made in the May 17 Amendment in the Nature of a Substitute.

\(^8\) Applicable baselines are defined as the average of the highest three annual peak demands a LSE has experienced during the 5 years immediately prior to the date of enactment of this Act.

\(^9\) Added by Manager’s amendment, June 26.
FERC is given backstop authority for multi-state lines that, among other criteria, are identified in regional or interconnection-wide electric grid plans as needed to meet demand for renewable energy.

**Regional planning entities.** (Sec. 151.) Within 3 months of FERC’s adoption of national electricity grid planning principles, states and other transmission planning entities that are willing to incorporate the national electricity grid planning principles in their planning shall identify themselves and the regions for which they propose to develop plans.

- FERC will encourage regional planning entities to cooperate and coordinate across regions and to harmonize regional electric grid planning with planning in adjacent or overlapping jurisdictions.
- FERC will support and (if asked) participate in the regional grid planning processes, and with DOE, may provide planning resources and assistance as required or requested by regional planning entities, including system data, cost information, system analysis, technical expertise, modeling support, dispute resolution services, and other assistance.\(^{10}\)

**Subtitle H: Centers\(^{11}\)**

**Building Assessment Centers.** (Sec. 172.) Provides funding to institutions of higher education for Building Assessment Centers that will identify opportunities for optimizing energy efficiency in existing buildings, promote new technologies and designs for optimizing energy efficiency, and train building industry professionals in energy efficient design. Authorizes $50 million to be appropriated annually.

**Centers for Energy and Environmental Knowledge and Outreach.** (Sec. 173.) Establishes no more than 10 regional centers at institutions of higher education to coordinate with and advise industrial research and assessment centers, Building Assessment Centers, and Clean Energy Application Centers. DOE shall select centers through a competitive process, and shall consider geographic diversity as a factor. No less than $5 million is authorized annually to carry out the section, subject to availability of funds.

**Subtitle J: Bioenergy Technology\(^{12}\)**

(Sec. 191.) This section establishes a National Bioenergy Partnership to provide coordination among programs of state governments, the federal government, and the private sector that support the institutional and physical infrastructure necessary to promote the deployment of sustainable biomass fuels and bioenergy technologies for the United States. Authorizes $5 million to be appropriated among the member states of five regions, and $2.5 million for region-wide activities.

**Title II – Energy Efficiency**

**Subtitle A: Building Energy Efficiency Programs**

**Greater energy efficiency in building codes.** (Sec. 201.) Targets are set for national average percentage improvements in buildings’ energy performance: 30% reduction in energy use in 2010, 50% reduction in energy use in 2014, and an additional 5% reduction in 2017 and every 3 years after. National energy efficiency building codes will be established to meet these targets.

- Within a year after a national energy efficiency building code is established or revised, each state is instructed to review and update its building code to meet or exceed the energy efficiency target, document that local building codes are meeting the target, or adopt the new national code.

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\(^{10}\) Some edits to this section added in Manager’s amendment, June 26.

\(^{11}\) Amendment accepted by Energy and Commerce Committee, May 19, proposed by Rep. Tammy Baldwin (D-Wis.). Replaces previous Subtitle H: Clean Energy Innovation Centers.

\(^{12}\) Amendment accepted by Energy and Commerce Committee, May 19, proposed by Rep. Jay Inslee (D-Wash.).
• Within a year after a national energy efficiency building code is established, if a state and/or local
government has not certified that its code(s) meet these standards, the national code will apply to
that jurisdiction.

• Within 2 years after certification of a state/local code or application of the federal code, each state
shall certify that it has achieved compliance with the applicable code (or made significant progress,
for certifications submitted within 7 years of enactment of this Act).

• States (or local governments, for non-complying states) in compliance with the applicable code are
eligible to receive 0.5% of emission allowances for the purposes in this section. States not in
compliance are also ineligible for excess funding through Section 363 of the Energy Policy and
Conservation Act, as well as various levels of other funding supplied through this Act.

Building Retrofit Program: Retrofit for Energy and Environmental Performance Program (REEP).
(Sec. 202.) This program will provide federal financial assistance to states as part of a program to retrofit
existing buildings for improvements in energy efficiency, water use, and other environmental attributes.

• EPA will support the REEP program through allowances deposited into states’ SEED accounts.

• The program will include detailed descriptions of funding options for state and local governments,
along with model forms, accounting aids, agreements and guides to best practices; and will support
up to 50% of the costs of retrofits, with funding increasing in proportion to efficiency achievement.

• As a condition of receiving funding for REEP, states must adopt the standards for training,
certification of contractors, certification of buildings, and post-retrofit inspection developed by
DOE for residential and commercial buildings; and establish fiscal controls and accounting
procedures sufficient to ensure proper accounting.

Energy efficient manufactured homes. (Sec. 203.) States may provide owners of pre-1976 manufactured
homes with rebates to use towards purchases of new Energy Star-qualified manufactured homes.

• The program is supported with allowances deposited into states’ SEED accounts. (Sec. 132.)

Building Energy Performance Labeling Program. (Sec. 204.) In developing a model building energy
performance label, EPA shall consider existing federal and state programs. EPA and DOE shall work
with state energy offices and other state authorities to implement the labeling program, including
outreach to local authorities.

• The program is supported with allowances deposited into states’ SEED accounts. (Sec. 132.) States
may become eligible to use allowance value to implement this program by adopting a requirement
that buildings be assessed and labeled, or adopting a plan to implement a model labeling program
and demonstrating continuous progress.

Subtitle B: Lighting and Appliance Energy Efficiency Programs

Lighting efficiency standards. (Sec. 211.) State standards for energy efficiency in outdoor lighting that
are adopted by January 1, 2015 (pursuant to a statute enacted before January 31, 2008) are not
preempted by the federal standard described here.

Early adopter water efficient product incentives. (Sec. 217.) States and other entities that establish
an incentive program for the purchase of residential water-efficient products or services may apply for
funds to pay up to 50 percent of the cost of establishing and carrying out the program. Funds are

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13 A state is in compliance with a code if at least 90% of new and substantially renovated building space in the state in the
preceding year meets the requirements of the code.

14 The original draft of the bill gave responsibility for this program to the Department of Energy. The change to EPA was
made in the May 17 Amendment in the Nature of a Substitute.
authorized to be appropriated between 2010 and 2014 (not out of the cap-and-trade allowance pool) to the EPA, which will determine the amount to allocate to each entity.

Subtitle C: Transportation Efficiency

Transportation efficiency goals. (Sec. 222.) A section is added to Title VIII of the Clean Air Act (created in Sec. 331 below) directing states to submit goals for transportation-related GHG emissions reductions to the EPA within 3 years, and to revise these every 4 years.

- States are also directed to ensure that, in each transportation plan or transportation improvement plan developed under Title 23 or 49 of the U.S. Code, a plan for achieving the GHG goals is submitted to the EPA and Department of Transportation (DOT) by each metropolitan planning organization (MPO) for an area with a population exceeding 200,000.
- If a state fails to submit goals or ensure the submission of a plan for any area in the state (regardless of non-attainment status), the EPA may impose a prohibition on Department of Transportation approval of projects or grant awards (in accordance with section 179(b)(1)). However, no prohibition may be imposed or action brought by the EPA based on the content or adequacy of a goal or plan, or failure to achieve the goal.
- The EPA and DOT may award competitive grants to MPOs to develop or implement plans, giving priority to applicants based on the amount of GHG emission to be reduced (on a total and per capita basis), cost effectiveness, potential for both short- and long-term reductions, and other factors.
- Nothing in this section infringes upon the existing authority of state or local governments to plan or control land use, or provide or transfer authority over land use to any other entity.

Smartway Transportation Efficiency Program. (Sec. 223.) This program supports technologies, products, fuels and strategies that reduce petroleum consumption, air pollution and GHG emissions from mobile sources. The program will include loans and leases to public and private entities (including state, tribal, and local governments, and regional organizations) for the purpose of adopting low-GHG technologies and strategies for mobile sources.

State vehicle fleets. (Sec. 224.) Requirements for fleet purchase of alternative fueled vehicles listed in the Energy Policy Act of 1992 are amended to ensure that the rules are consistent with guidance issued for federal fleets.

Electric and Thermal Waste Energy Recovery Award Program. (Sec. 242.) This program makes monetary awards to electric generation facilities or thermal energy production facilities to encourage innovations in recovering thermal energy. As part of the program, DOE will assist state regulatory commissions in providing appropriate regulatory status for thermal energy byproduct businesses, to encourage utilities to sell unused thermal energy.

Clean Energy Manufacturing Revolving Loan Fund Program.15 (Sec. 246.) The Secretary of Commerce is directed to establish a program to award grants to states to establish revolving loan funds for small and medium-sized manufacturers. Loans will be given to finance the cost of re-equipping, expanding, or establishing a manufacturing facility in the U.S. to produce clean-energy and energy-efficiency products or their components; or to reduce the energy intensity or GHG production of a U.S. manufacturing facility. Federal funds may not make up more than 80 percent of any loan.

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15 Added by Manager’s amendment, June 26.
Subtitle H: Green Resources for Energy Efficient Neighborhoods\textsuperscript{16}

**Residential Energy Efficiency Block Grant Program.** (Sec. 296.) The Secretary of Housing and Urban Development (HUD) is instructed to make grants to states and other entities to carry out energy efficiency improvements in new and existing single-family and multi-family housing.

**Renewable energy source loans.** (Sec. 299D.) HUD is instructed to provide loans to states and Indian tribes to provide incentives to owners of single-family and multifamily housing, commercial properties, and public buildings for renewable energy sources, energy efficiency and conservation improvements, or electricity and hot water infrastructure. Funds come from the U.S. Treasury (not from cap-and-trade allowances), with $5 billion authorized to be appropriated.

**Title III – Reducing Global Warming Pollution**

**Subtitle A: Global Warming Pollution Reduction Goals and Targets.**

(Sec. 311.) This title amends the Clean Air Act to create economy-wide GHG emissions reduction goals, decreasing 3\% below 2005 levels in 2012, 20\% below 2005 levels in 2020; 42\% below 2005 levels in 2030; and 83\% below 2005 levels in 2050. It then establishes slightly modified targets for sources covered by the cap-and-trade program defined in this title: 3\% reduction by 2012, 17\% by 2020, 42\% by 2030, and 83\% by 2050.

- Five of the six Kyoto gases are covered (HFCs are excluded and covered under a separate cap (Sec. 332.)), plus NF\textsubscript{3} and any other anthropogenic gas designated as a GHG by the EPA.
- The program covers a hybrid of up-, down-, and mid-stream sources, with some sources phasing in over the first 5 years of the program.
- Along with other cost-containment mechanisms, limited domestic and international offsets are allowed (up to 2 billion tons annually). Starting in 2018, international offsets are only worth 80\% of an allowance.

**Greenhouse gas registry.** (CAA Sec. 713.) Within 6 months of enactment, the EPA shall establish a federal GHG registry that takes into account the best practices from the most recent federal, state, tribal, and international protocols for the measurement, accounting, reporting, and verification of GHG emissions, including protocols from the Climate Registry and other mandatory state or multistate authorized programs. Regulations shall include an explanation of any major differences in approach between the system established under the regulations and such registries and programs.

- Reporting would begin in 2011 for the years 2007-2010, and would be required quarterly starting in 2011.

**Early offset supply.** (CAA Sec. 740.) EPA will issue an offset credit for each credit issued under any regulatory or voluntary GHG offset program established by state or tribal law or regulation prior to January 1, 2009 (and for offsets issued by other programs that are at least as stringent), provided that the program:

- has developed offset project type standards, methodologies, and protocols through a public consultation process or peer review, and has made these available to the public;
- requires verification by a state regulatory agency or accredited third party;
- require that all credits are registered in a publicly accessible registry; and
- ensures that no credits are issued for reductions funded or solicited by the entity administering the program.

(Offset credits that have expired or been retired, cancelled, or used for compliance are not eligible, and early offset credits will only be issued for three years after enactment.)

**Savings provision.** (CAA Sec. 721.) Nothing in this title shall be construed as:

- affecting or requiring a change in any state law regulating electric utility rates and charges;

\textsuperscript{16} Subtitle added by Manager’s amendment, June 26.
• limiting state regulation under such a state law;
• modifying the Federal Power Act or affecting the authority of the Federal Energy Regulatory Commission (FERC) under that Act; or
• interfering with or impairing any program for competitive bidding for power supply in a state in which such program is established.

Subtitle B: Disposition of Allowances (CAA Secs. 781-789.)
Allowances are allocated for the following purposes, with allocation levels changing over time:

- **Protection of consumers from energy cost increases.** This includes allocations to electricity local distribution companies, including small electricity local distribution companies (Sec. 783); natural gas local distribution companies (Sec. 784); and states for the purpose of mitigating home heating oil and propane cost increases (Sec. 785). In addition, a total of 15% of allowance value will be distributed to low- and moderate-income families (Sec. 721(a)).

- **Protection of U.S. industrial competitiveness.** This includes allocations to energy- and trade-intensive industrial sectors (Sec. 765) and domestic oil refineries (Sec. 721(a)).

- **Investment in energy efficiency and clean energy technologies.** This includes allocations to states for investment in these technologies (Sec. 132); for greater efficiency in building codes (Sec. 201); for energy research and development (Secs. 171-172); for carbon capture, storage and sequestration technology (Sec. 786); for clean vehicle technology (Sec. 124); to compensate early-adopting entities for past emissions reductions (Sec. 795); and to provide incentives for agricultural practices that reduce emissions or sequester carbon (Sec. 788).

- **Funding to reduce emissions through mitigating deforestation in developing countries.** (Sec. 781).

- **Funding for domestic climate change adaptation programs.** This includes state programs to adapt to climate change impacts (Sec. 453), federal and state natural resources adaptation programs (Sec. 480), and federal health protection and promotion programs (Sec. 467).

- **Funding for international programs.** This includes international adaptation and clean technology deployment (Sec. 491-495).

- **Funding for investment in green jobs development and worker adjustment assistance.** (Sec. 421-427).

From 2012-2025 remaining allowances will be used to reduce the federal deficit (Sec. 782(q)), and after 2025, remaining allowances will be used to fund a consumer refund, (Sec. 782(r)).

**Direct allocation of allowances to states.** States will directly receive allowances to:

- **Make investments in renewable energy and energy efficiency.** (Sec. 132.) States will receive 9.5% of allowances from 2012 through 2015; 6.5% of allowances in 2016 and 2017; 5.5% of allowances from 2018 through 2021; approximately 4.55% of allowances from 2022-2025 (3.55% of which will be from future vintages); and 4.5% of allowances thereafter for investments in renewable energy and energy efficiency.

- **Protect consumers from home heating oil and propane price increases.** (Sec. 785.) States will receive allowances for programs to benefit users of home heating oil and propane. They will receive a declining percentage of allowances, beginning with 1.875% of allowances in years 2012 and declining to 0.3% in year 2029.

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17 Added during markup, as filed with Rules Committee, June 23, 2009.
19 Added by Manager’s amendment, June 26, 2009.
20 Added by Manager’s amendment, June 26, 2009.
Contingent allocation of allowances to states. In addition, states may receive allowances or funding from allowance revenue for the following programs if they meet eligibility requirements:

- **Greater efficiency in building codes.** (Sec. 201.) States will qualify to receive a portion of the 0.5% of allowance value allocated to fund compliance with the national energy efficiency building codes if the Secretary accepts the state’s certification that it has complied with or made significant progress towards complying with energy efficiency building codes promulgated pursuant to Sec. 201.

- **State programs to build resilience to climate change impacts.** (Sec. 453.) States will qualify to receive allowances allocated to fund programs for domestic adaptation contingent on the approval of a State Climate Change Adaptation Strategy. States will receive 0.9% from 2012 through 2021; 1.9% from 2022 to 2026; 3.9% from 2027 to 2050.

- **Wildlife and natural resources adaptation.** (Sec. 480(a)). State agencies will qualify to receive allowances allocated to fund programs for wildlife and natural resources adaptation contingent on approval of State Natural Resource Adaptation Plans. Wildlife and natural resources adaptation shall receive 0.385% of allowances from 2012 through 2021, 0.77% from 2022 through 2026; and 1.54% from 2027 through 2050.

Other allocations of interest to states. Other categories of allocations will not go directly to states but will directly benefit state residents, electricity and natural gas ratepayers, and trade-vulnerable industries. Key allocations include:

- **Electricity and natural gas local distribution companies (LDCs).** (Secs. 783-784.) Electricity and natural gas LDCs will receive emissions allowances “for the benefit of retail ratepayers,” beginning with 43.75% of allowances in 2012 and declining to 7% in 2029. Allocation to Electricity LDCs will be based half on GHG emissions and half on electricity deliveries.\(^{21}\) There will be an additional allocation, beginning at 0.5%, for “small” electricity local distribution companies that may be used for energy efficiency, renewable energy, and rate payer benefit.\(^{22}\) Allocations to natural gas local distribution companies shall be based on natural gas deliveries.\(^{23}\)

- **Tax refund program to benefit low-income consumers.** (Sec. 431.) Low-income households will be provided cash benefits to reimburse those households for estimated losses in purchasing power resulting from ACESA. In general, households at 150% of the federal poverty line, or who qualify for food stamps, will be eligible to qualify.

- **Rebates to trade-vulnerable industries and “border tariff” program** (Sec. 401.) The EPA will determine which covered industries are eligible for allowance rebates, taking into account greenhouse gas- and trade- intensity of the industry. If no international agreement on GHG emissions reductions is reached by 2018, the President will implement a program requiring international importers from countries without an equivalent emissions policy to purchase international reserve allowances at the same price as domestic allowances.\(^{24}\)

Exchange for state-issued allowances. (CAA Sec. 790.) Any person in the U.S. will be allowed to exchange GHG emission allowances issued before December 31, 2011 by the state of California, the

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\(^{21}\) Electricity companies may chose any three consecutive years to serve as the base year for emissions and delivery calculations beginning in 1999.

\(^{22}\) As amended in text filed with the Rules Committee, June 23, 2009.

\(^{23}\) Natural gas companies may chose any three consecutive years to serve as the base year for delivery calculations beginning in 1999.

\(^{24}\) The manager’s amendment modified this language to provide less discretion to the President to implement this program. Under the current language, the program is to be implemented unless Congress or the President finds that it would harm the national economy or environment.
Regional Greenhouse Gas Initiative (RGGI), or the Western Climate Initiative\(^{25}\) (“state allowances”) for federal emission allowances.

- The number of federal allowances received will be sufficient to compensate for the cost of obtaining and holding state allowances, where the cost of obtaining a state allowance is the average auction price in the year in which the allowance was issued.

**Exchange for early action offset credits.**\(^{26}\) (CAA Sec. 795.) Offset credits issued by a state or voluntary offset program before January 1, 2009 for activities in the U.S. from January 1, 2001–January 1, 2009, may be exchanged for emissions allowances. The number of allowances given will be based on the average monetary value of the credits from January 1, 2006–January 1, 2009, adjusted for inflation, with 0.75% of 2012 allowances distributed for this purpose. Other documented GHG reductions or sequestration resulting from actions in the U.S. in the same time period are also eligible for allowances, with the amount based on the CO\(_2\)/ton value received by entities in exchange for credits (adjusted for inflation), with 0.25% of 2012 allowances distributed for this purpose. (The credits are then retired.)

**Subtitle C: Additional Greenhouse Gas Standards**

**State programs.** (Sec. 334.) Section 116 of the Clean Air Act is modified to state explicitly that states’ authority to “adopt or enforce (1) any standard or limitation respecting emissions of air pollutants or (2) any requirement respecting control or abatement of air pollution” includes any provisions to cap GHG emissions and to require the surrender of emission allowances or offset credits to demonstrate compliance with state requirements. However, despite this change, the Act does preempt states (or political subdivisions of a state) from implementing or enforcing a cap-and-trade program that covers any federally capped emissions in the years 2012-2017.\(^{27}\)

- The preemption does not include, among other things, a target or limit on greenhouse gases implemented through means other than cap and trade, fleet-wide motor vehicle emission requirements, or requirements that fuels or other products meet an average pollution emission rate or lifecycle GHG standard.

**Title IV – Transitioning to a Clean Energy Economy**

Title IV includes provisions to improve the competitiveness of U.S. industry through allowance rebates and border tariffs, creates an energy tax credit and energy refund program for low-income consumers, establishes a program for exporting clean technology, establishes a national climate change adaptation program, requires the preparation of a strategic plan to prepare for and respond to the public health impacts of climate change, requires the adoption of a Natural Resources Climate Change Adaptation Strategy, and creates an International Climate Change Adaptation Program. These provisions do not relate explicitly to the role of states and are not addressed here.

**Subtitle B: Green Jobs and Worker Transition**

**Clean energy curriculum development grants.** (Sec. 421.) The Secretary of Education is authorized to award grants to universities and colleges to develop programs of study that prepare students for careers in renewable energy, energy efficiency, and other forms of global warming mitigation.

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\(^{25}\) Language making Western Climate Initiative allowances eligible for exchange was added into the revised draft released on May 15, 2009, and was not present in the Discussion Draft released on March 31, 2009.

\(^{26}\) Added by Manager’s amendment, June 26.

\(^{27}\) The Discussion Draft released on March 31 preempted state “caps” on emissions capped by the federal program. This language was changed to restrict only cap-and-trade programs. State targets or limits on GHG emissions that are implemented other than through the issuance and surrender of a limited number of allowances are explicitly permitted.
Climate change worker adjustment assistance. (Secs. 425-427.) Any worker displaced as a result of the Title VII of the Clean Air Act is entitled to 156 weeks of income supplement, 80% of their monthly health care premium, up to $1,500 for job search assistance, up to $1,500 for moving assistance, and additional employment services for skills assessment, job counseling, training, and other services.

- Workers must petition for eligibility by filing with the Governor of their State. The Governor shall ensure rapid response activities authorized under federal laws and assist the Secretary of Labor in the review of the petition.

Subtitle E: Adapting to Climate Change

National climate change research and data management. (Sec. 451.) The Office of Science and Technology Policy (OSTP) is assigned as the lead agency for the inter-agency U.S. Global Change Research Program. This research program is tasked with developing a National Global Change Research and Assessment Plan that addresses the information needs of federal, state, regional and local authorities to develop policies to mitigate global change and reduce vulnerabilities, and also with developing national vulnerability assessments every five years.

National Climate Service. (Sec. 452.) This section establishes a three-year process to evaluate options for forming a National Climate Service, led by director of OSTP. Establishes a Climate Service Program within NOAA to study effects of climate and provide information and technical support for federal, regional, state, tribal and local governments. Establishes six new Regional Climate Centers (RCCs).

State programs to build resilience to climate change impacts. (Sec. 453.) Allowances provided for domestic adaptation shall be distributed among state governments based on population and the relative per-capita income of the state subject to maximum and minimum allocation factors. Receipt of allowances shall be contingent on approval of a state climate adaptation plan that assesses state vulnerability to climate change, identifies and prioritizes cost-effective adaptation projects, and is revised and reapproved at least every five years. States shall use allowances pursuant to their climate adaptation plan to build resilience to the impacts of climate change. Eligible projects include, but are not limited to, those designed to respond to extreme weather events such as flooding or hurricanes, changes in water availability, heat waves, sea level rise, ecosystem disruption, and air pollution.

State natural resources adaptation plans. (Sec. 479.) In order to be eligible for natural resource allowance allocations to states, each state must prepare a natural resources adaptation plan detailing current and projected efforts to address the potential impacts of climate change and ocean acidification on natural resources and coastal areas within the state’s jurisdiction. Each plan must be consistent with the federal Natural Resources Climate Change Adaptation Strategy created under Sec. 476 to be approved.

Natural Resources Climate Change Adaptation Fund. (Sec. 480.) States are to carry out natural resources adaptation using allowances allocated in Sec. 782. in accordance with state plans approved under Sec. 479. Of those funds made available to States:

- 84.4% shall be available to state wildlife agencies in accordance with the Pittman-Robertson Wildlife Restoration Act apportionment formula.
- 15.66% shall be available to State coastal agencies under the Coastal Management Act apportionment formula.

Includes a 10% cost sharing provision.

National Wildlife Habitat and Corridors Information Program. (Sec. 481.) This section establishes a program in the Department of the Interior to support states and tribes in the development of a Geographic Information System (GIS) database of fish and wildlife habitat corridors, and to facilitate the use of database tools in wildlife management programs.