SECTION-BY-SECTION
H.R. 2454: AMERICAN CLEAN ENERGY AND SECURITY ACT OF 2009
AS REPORTED ON JUNE 5, 2009

SEC. 1. -- SHORT TITLE

This section provides that the bill be entitled the "American Clean Energy and Security Act of 2009."[1]

TITLE I – CLEAN ENERGY

Title I would establish a renewable electricity standard, a low carbon transportation fuel standard, and efficiency standards for major sectors of the U.S. economy.

Subtitle A-Renewable Electricity Standard

Sec. 101 would require all retail electricity suppliers that annually sell 4,000,000 megawatt hours or more of electricity to consumers for purposes other than resale to either purchase a percentage of their electricity from renewable energy sources (including wind, biomass, solar, geothermal, certain hydropower projects, landfill gas, incremental hydropower, marine and hydrokinetic renewable energy, biogas and biofuels derived exclusively from eligible biomass, wastewater treatment gas, coal mine methane and qualified waste-to-energy), or make an "alternative compliance payment" (in the amount of $25 per MWh or 2.5 cents per kilowatt hour adjusted for inflation every year) to Federal Energy Regulatory Commission (FERC). To implement the new program, FERC would issue "Federal renewable energy credits" to renewable electricity generators and suppliers would be required to submit back to FERC a quantity of credits equal to 20% of their base amount by 2020, up to one quarter of which may be met with electricity savings as set forth below: [2]

Year	Required Annual Percentage
2012	6.0
2013	6.0
2014	9.5
2015	9.5
2016	13.0
2017	13.0

[1] The Act would amend the Clean Air Act (CAA); Public Utility Regulatory Policies Act of 1978 (PURPA); Federal Power Act; Energy Policy and Conservation Act; Energy Policy Act of 2005 (EPAct 2005); Energy Independence and Security Act of 2007 (ESIA); Safe Drinking Water Act; Inspector General Act of 1978; Commodity Exchange Act; Energy Conservation and Production Act; Energy Policy Act of 1992; National Energy Conservation Act; Federal Deposit Insurance Corporation Improvement Act of 1991; Legal Certainty for Bank Products Act of 2000; Natural Gas Act; Natural Gas Policy Act of 1978; Workforce Investment Act of 1998; and the Internal Revenue Code of 1986.

[2] Sec. 101(c) would authorize FERC to increase the proportion of the requirement that can be met with electricity savings to up to two-fifths for electric supplies located within that state.

2018	16.5
2019	16.5
2020	20.0
2021-2039	20.0

The alternative compliance payment income is given to the utilities which provided credits. Credits could be traded and banked for up to 3 years. FERC would oversee the markets for credits and any derivative instruments, and suppliers failing to comply would be subject to civil penalties. States could adopt more stringent standards. Nuclear energy would not be included and is not substantively addressed in the Act. This federal RES is in addition to, not in lieu of, any existing state renewable mandates.

Subtitle B—Carbon Capture and Sequestration

Secs. 111-113 would require the Environmental Protection Agency (EPA) to commission various studies and reports and issue regulations to facilitate commercial deployment of CCS technologies. DOE would also be required to issue a report on technical, siting, financing and regulatory barriers to construction and operation of pipelines for sequestration or enhanced hydrocarbon recovery.

Sec. 114 incorporates Rep. Boucher's H.R. 1689, which would authorize formation of an industry "Carbon Storage Research Corporation" that would operate as an affiliate of the Electric Power Research Institute. The Corporation would be authorized to assess deliveries of fossil fuel-fired electricity to retail consumers in the amount of approximately $1 billion annually for 10 years and to distribute those funds to support commercial-scale CCS projects.

Sec. 115 would require EPA to establish a program to distribute funds to support commercial deployment of CCS in electric power generation and industrial operations.

Sec. 116 would establish new standards for coal-fueled power plants permitted (i) after January 1, 2020 (emission limit that is a 65% reduction), and (ii) after January 1, 2009, and before January 1, 2020 (emission limit that is a 50% reduction).

Subtitle C—Clean Transportation

Sec. 121 would require electric utilities to develop a plan to support the use of plug-in hybrid and other types of electric vehicles. State regulatory authorities and non-regulated utilities would also be required to develop cost recovery plans, protocols and standards for integrating electric vehicles and Smart Grid systems and devices.

Sec. 122 would require DOE to establish a "Large-Scale Vehicle Electrification Program" to deploy and integrate plug-in electric vehicles in multiple regions. DOE would also be authorized to provide funding to support the purchase of new plug-in electric vehicles and supporting infrastructure.

Sec. 123 would authorize DOE to also provide assistance to automobile manufacturers to facilitate the manufacture of plug-in electric vehicles.

Sec. 124 would authorize EPA working with DOE to invest in clean vehicles by providing emission allowances to automobile manufacturers and component suppliers to pay a portion of the costs associated with upgrading vehicles and components.

Sec. 125 would increase the authorization in EISA from $25,000,000 to $50,000,000 for loan guarantees for the upgrade of manufacturing facilities.

Sec. 126 would amend the definition of renewable biomass to expand the types of biomass from Federal and non-Federal lands that may be used to make renewable fuel that qualifies for the Renewable Fuels Standard.

Sec. 127 would provide the Secretary of Transportation with the authority to require light-duty automobile manufacturers to make vehicles capable of operating on ethanol and methanol-based fuels (E85 or M85).

Sec. 128 would establish a Cash for Clunkers program, but this provision is likely to be stripped out of the bill, as the provision passed in the House on June 9th by a vote of 298-119.

Sec. 129 would amend the diesel emission reduction grant program established under EPAct 2005 by adding American Samoa, Guam, the Commonwealth of the Northern Mariana Islands, Puerto Rico and the Virgin Islands to be eligible to receive grants.

Sec. 130 would add a definition of “Renewable Fuel” and “Renewable Fuel Pipeline” to EPAct 2005.

Subtitle D—State Energy and Environment Development Funds

Sec. 131 would require EPA to establish a program and develop model regulations for SEED Funds.

Sec. 132 would provide the distribution allowance formula: (i) 1/3 of allowances divided equally among the States, (ii) 1/3 distributed based on State population, and (iii) 1/3 distributed based on energy consumption.

Subtitle E—Smart Grid Advancement

Sec. 141 would provide relevant definitions.

Sec. 142 would require DOE and EPA to analyze and incorporate Smart Grid technologies into the Energy Star program and to include Smart Grid capability information on Energy Star labels.

Sec. 143 would require the FTC to initiate a rulemaking to consider noting ENERGY GUIDE on applicable products.

Sec. 144 would require FERC to develop and publish methodologies to enable States and load-serving entities (LSE) to publish peak demand reduction goals. LSEs would be required to set such goals for 2012, and further goals for 2015. States could adopt additional peak load management programs. These peak load measures are much broader than smart grid; it is also unclear which entities would have final say over the setting of goals.

Sec. 145 would require DOE to provide Smart Grid information to consumers.

Sec. 146 would amend EPAct 2005 to include rebates for efficient appliances with smart grid features and capability, and would increase funding from $50,000,000 to $100,000,000 for each fiscal year from 2010 through 2015.

Subtitle F—Transmission Planning

Sec. 151 would require FERC to adopt national grid planning principles to achieve national policy goals. Transmission planning entities would be required to submit plans to FERC which would review those plans, make recommendations, convene multi-regional meetings, and report to Congress on the regional grid planning process. The Act does not provide FERC any additional siting authority.

Sec. 152 would adopt a standard requiring utilities to interconnect with and to provide net metering of power deliveries to and receipts from Federal agencies that own, operate or site facilities generating renewable energy.

Sec. 153 would amend EPAct 2005 to extend the loan guarantee authority to cover high-efficiency or super-conductive high-voltage electricity transmission. Up to $100,000,000 is appropriated for this program for fiscal year 2010.

Subtitle G—Technical Corrections to Energy Laws

Sec. 161 would provide corrections relating to energy efficiency standards for appliances and lighting.

Sec. 162 would make a minor technical correction to EPAct 2005.

Subtitle H—Energy and Efficiency Centers

Sec. 171 would establish “Clean Energy Innovation Centers” to promote commercial deployment of clean alternatives to oil and other fossil fuels and will be funded through allowances.

Sec. 172 would authorize DOE to establish "Building Assessment Centers" to promote building efficiency. $50,000,000 for fiscal year 2010 and each fiscal year thereafter has been authorized.

Sec. 173 would authorize DOE to establish not more than 10 regional "Centers for Energy and Environmental Knowledge and Outreach" to provide leadership to all other industrial research and assessment centers. Not less than $5,000,000 for fiscal year 2010 and each fiscal year thereafter shall be authorized for workforce training and a total of $10,000,000 for fiscal year 2010 and each fiscal year thereafter to carry out this program.

Subtitle I—Nuclear and Advanced Technologies

Sec. 181 would make revisions to the loan guarantee program authority provisions in EPAct 2005.

Sec. 182 would state the purpose of section 183-189 of Subtitle I as the promotion of domestic development and deployment of clean energy technologies through the establishment of a self-sustaining "Clean Energy Deployment Administration".

Sec 183 would provide relevant definitions for this subtitle.

Sec. 184 would establish a "Clean Energy Investment Fund" in the Treasury.

Sec. 185 would require DOE to develop and publish for review and comment, near-, medium-, and long-term goals for the deployment of clean energy technologies.

Sec. 186 would establish within DOE a "Clean Energy Deployment Administration".

Sec. 187 would authorize the "Clean Energy Deployment Administration" to issue direct loans, letters of credit, and loan guarantees to deploy clean energy technologies.

Sec. 188 would grant the full faith and credit of the United States with respect to liabilities arising under this program and would limit the payment of liabilities to the Fund established under Sec. 184 or any associated credit account.

Sec. 189 would grant certain authority to the Administrator of the "Clean Energy Deployment Administration", and would require periodic reports to relevant Congressional Committees.

Subtitle J—Miscellaneous

Sec. 191 would require a study of ocean renewable energy and transmission planning and siting by FERC, Interior and NOAA.

Sec. 192 would authorize DOE to establish a clean technology business competition grant program. The program is authorized to be appropriated $20,000,000.

Sec. 193 would authorize DOE to establish a "National Bioenergy Partnership" to provide coordination among programs of State governments, the Federal Government, and the private sector. Five regions will participate in the Partnership and will be administered by the CONEG Policy Research Center, the Council of Great Lakes Governors, the Southern States Energy Board, the Western Governors Association, and the Pacific Regional Biomass Energy Partnership led by the Washington State University Energy Program. $7,500,000 for each of fiscal years 2010 through 2014 have been allocated for this program.

Sec. 194 would establish an Office of Consumer Advocacy within FERC.

TITLE II – ENERGY EFFICIENCY

Title II would set new efficiency standards for buildings, lighting and appliances, transportation fuels, utilities, and industrial plants.

Subtitle A—Building Energy Efficiency Programs

Sec. 201 would require DOE to set new targets for national commercial and residential model and building energy codes, including initially 30% improvements relative to the baseline code[3], and 50% improvements effective January 1, 2014 for residential buildings and January 1, 2015 for commercial buildings. Beginning on January 1, 2017 for residential buildings and January 1, 2018 for commercial buildings, and every 3 years thereafter through January 1, 2029 and January 1, 2030, respectively, a 5% additional reduction relative to the baseline code must be accomplished. DOE may also set a national building code energy efficiency target. States would be required to review and update their building codes and standards, and to certify for new and renovated buildings that they have achieved or made significant progress towards achieving compliance. No cost or feasibility study for the targeted reductions is mandated. $100,000,000 for each of fiscal years 2010 through 2020 has been authorized to be appropriated for DOE to carry out this program.

Sec. 202 would require DOE to establish a "Retrofit for Energy and Environmental Performance" (REEP) program to facilitate retrofitting of existing residential and commercial buildings. EPA would develop national retrofit standards for residential buildings and DOE would develop national retrofit standards for commercial buildings. DOE, in consultation with EPA and HUD, could distribute funds to offset retrofit costs. For each of fiscal years 2010 through 2013, $50,000,000 is authorized to be appropriated to EPA and $20,000,000 to DOE to carry out this program.

[3] For purposes of this section, 'baseline code' means the 2006 International Energy Conservation Code published by the International Code Council for residential buildings and the code published in ASHRAE Standard 90.1-2004 for commercial buildings.

Sec. 203 would authorize DOE to provide grants and rebates to States and low-income owners of pre-1976 manufactured homes to assist in purchasing replacement Energy Star qualified manufactured homes. Rebates shall not exceed $7,500 per manufactured home.

Sec. 204 would require EPA to establish a building energy performance labeling program to enable and encourage reduced energy consumption. $50,000,000 is authorized to be appropriated for each of fiscal years 2010 through 2020 for EPA to carry out this program, and $20,000,000 for fiscal year 2010 and $10,000,000 for fiscal years 2011 through 2020 for DOE to carry out this program.

Sec. 205 would establish a tree planting program through DOE for various reasons, such as, because shade trees planted in strategic locations can reduce residential cooling costs by as much as 30%.

Sec. 206 would establish a deadline of December 19, 2009, for the designation by DOE and EPA of an information technology organization to consult and coordinate with them on data center energy efficiency.

Subtitle B—Lighting and Appliance Energy Efficiency Programs

Sec. 211 would set new outdoor lighting energy efficiency standards to take effect in 2011, 2013 and 2015; outdoor high light output lamps standards to take effect in 2012; portable lighting fixture standards to take effect in 2012; and art work light fixtures standards to take effect in 2012. EPA would also be required to set standards for incandescent lamp reflectors to take effect by July 1, 2013.

Sec. 212 would set new standby electric usage standards for water dispensers, hot food holding cabinets and portable electric spas (*i.e.* hot tubs) to take effect in 2012 and new standards for commercial warm air furnaces to take effect in products manufactured after January 1, 2011.

Sec. 213 would modify test procedures for appliance efficiency determinations for any product covered by DOE energy efficiency regulations (including clothes and dishwashers, showerheads, faucets, televisions and other products). DOE would be required to consider GHG emission reductions and Smart Grid technology.

Sec. 214 would require DOE to establish a "Best-in-Class Appliances Deployment Program" and would award retailers or distributors with bonuses for increased sales of high-efficiency installed building equipment, consumer electronics, and household appliances, and bounties for the replacement and recycling of older, inefficient appliances. Bonuses would also be available to manufacturers that develop "Superefficient Best-in-Class" products. $300,000,000 for each of the fiscal years 2010 through 2014 are authorized to be appropriated to DOE to carry out this program.

Sec. 215 would establish a WaterSense program within EPA to identify and promote water efficient products, buildings and landscapes, and services. $7,500,000 for fiscal

year 2010, $10,000,000 for fiscal year 2011, $20,000,000 for fiscal year 2012, and $50,000,000 for fiscal year 2013 and each year thereafter are authorized to be appropriated to carry out this program.

Sec. 216 would direct federal agencies to make water-efficient procurement decisions.

Sec. 217 would provide eligible States with rebates for water efficient products. $50,000,000 for fiscal years 2010 and 2011, $75,000,000 for fiscal year 2012, $100,000,000 for fiscal year 2013, and $150,000,000 for fiscal year 2014 and each year thereafter shall be authorized to be appropriated to carry out this program.

Sec. 218 would establish a program within EPA to assist in the replacement of wood stoves or pellet stoves that do not meet certain performance standards. $20,000,000 for the period of fiscal years 2010 through 2014 shall be authorized to be appropriated to carry out this program.

Sec. 219 would add new requirements to the Energy Star program. $5,000,000 shall be authorized to be appropriated for fiscal year 2010 and for each fiscal year thereafter to carry out this program.

Subtitle C—Transportation Efficiency

Sec. 221 would require EPA to set new GHG emissions standards across the transportation sector, including new motor vehicle standards (that meet or exceed California law for vehicle emissions (AB 1493)) by December 31, 2010; new heavy-duty vehicles and engines standards by 2010; and new marine vessels, locomotives, aircraft and engines standards by December 31, 2012. EPA would have discretion to authorize and regulate averaging, banking and trading GHG emission credits across transportation categories.

Sec. 222 would require States to submit to EPA and the Department of Transportation (DOT) plans that set goals for 4-, 10- and 20-year periods and address strategies to reduce mobile source GHG emissions in metropolitan areas, and to update those plans every 4 years. Failure to comply could result in loss of highway funds. Grants may be awarded to States or metropolitan planning organizations.

Sec. 223 would require EPA to establish a “Smartway Transportation Efficiency Program” to quantify, demonstrate and promote, including through a financing program, the benefits of technologies, products, fuels and operational strategies that reduce petroleum consumption, air pollution and GHG emissions from the mobile source sector.

Sec. 224 would require DOE to update State fleet rules to be consistent with current law.

Subtitle D—Industrial Energy Efficiency Programs

Secs. 241 and 242 would require DOE to develop new industrial plant efficiency certification standards, and to provide monetary awards to owners and operators of new and existing electricity energy generation facilities or thermal energy production facilities using fossil or nuclear fuel to encourage the recovery of any thermal energy that is a byproduct of electric power generation.

Sec. 243 would amend EISA to clarify that those who recover waste energy can elect to receive incentive grants or tax credits, but not both.

Sec. 244 would require DOE to conduct an assessment of electric motors and develop recommendations based on that assessment.

Sec. 245 would amend the Energy Policy and Conservation Act by adding a provision authorizing a "Motor Efficiency Rebate Program" that would authorize to be appropriated $80,000,000 for fiscal year 2011, $75,000,000 for fiscal year 2012, $70,000,000 for fiscal year 2013, $65,000,000 for fiscal year 2014, and $60,000,000 for fiscal year 2015.

Subtitle E—Improvements in Energy Savings Performance Contracting

Sec. 251 would establish competition requirements for federal agency "Energy Savings Performance Contracts," and authorize such contracts to be used for renewable energy production, including solar, at federal facilities.

Subtitle F—Public Institutions

Sec. 261 would make not-for-profit hospital facilities eligible for grants for energy efficiency improvement and energy sustainability.

Sec. 262 would amend EISA to remove limits on funds received by communities through the Energy Efficiency and Conservation Block Grant program.

Sec. 263 would amend EISA to allow small communities to join with other neighboring small communities in a joint program under the Energy Efficiency and Conservation Block program.

Sec. 264 would authorize grants to community development organizations to provide financing and to promote energy efficiency in low-income rural and urban communities. $50,000,000 for each of fiscal years 2010 through 2015 is authorized to be appropriated.

Subtitle G—Miscellaneous

Sec. 271 would amend the National Energy Conservation Policy Act to require OMB to collaborate with federal agencies on energy efficient information and communications technologies.

Sec. 272 would establish national energy efficiency goals: (i) improvement in the overall energy productivity of the U.S. of at least 2.5% per year by 2012, and (ii) maintain that annual rate of improvement each year through 2030.

Sec. 273 would require DOE to establish an "Affiliated Island Energy Independence Team" to improve energy efficiency and reduce reliance on imported fossil fuels.

Sec. 274 would require an EPA study to determine the feasibility of establishing a national program for measuring, reporting, publicly disclosing, and labeling products or materials sold in the United States for the carbon content. $5,000,000 is authorized to be appropriated for the study and $25,000,000 for each of fiscal years 2010 through 2025 to carry out this program.

TITLE III--REDUCING GLOBAL WARMING POLLUTION

This title would set mandatory caps on U.S. GHG emissions and establish a cap and trade program.

Subtitle A—Reducing Global Warming Pollution

Sec. 301 (Part A) would make findings that global warming poses a significant threat to the national security, economy, public health and welfare and environment of the U.S. and other nations, and would require EPA establish a "Global Warming Pollution Reduction Program." This program would have goals of economy-wide caps on U.S. GHG emissions as follows:

3% below 2005 levels by 2012
20% below 2005 levels by 2020
42% below 2005 levels by 2030
83% below 2005 levels by 2050

This program would require caps for specified sources on GHG emissions and require reductions as follows:

3% below 2005 levels by 2012
17% below 2005 levels by 2020
42% below 2005 levels by 2030
83% below 2005 levels by 2050

"Covered entities" (defined in Sec. 312, pp. 172-173) would include the following:

i) any electricity source;

ii) any stationary source that produces or imports petroleum-based or coal-based liquid fuel, petroleum coke, or natural gas liquid, the combustion of which produces more than 25,000 tons annually of carbon dioxide equivalent;
iii) any stationary source that produces or imports more than 25,000 tons annually of carbon dioxide equivalent of six specified gases;[4]
iv) any stationary source that produces or imports more than 25,000 tons annually of carbon dioxide equivalent of nitrogen trifluoride;
v) any geologic sequestration site;
vi) any stationary source in specified industrial sectors;[5]
vii) stationary sources in the chemical or petrochemical sector;[6]
viii) any stationary source in the chemical or petrochemical sector that is engaged in ethanol or methanol production or produces a chemical or petrochemical product that emits more than 25,000 tons annually of carbon dioxide equivalent;
ix) stationary sources engaged in ethanol production, ferroalloy production, fluorinated gas production, food processing, glass production, hydrogen production, iron and steel production, lead production, pulp and paper manufacturing and zinc production that emit more than 25,000 tons annually of carbon dioxide equivalent;
x) any fossil fuel-fired combustion device (such as a boiler) that emits more than 25,000 tons of carbon dioxide equivalent annually; and
xi) any natural gas local distribution company that delivers 460,000,000 cubic feet or more annually of natural gas to customers that are not covered entities.

Sec. 301 (Part A) would also require EPA to set aside allowances that would be transferred to developing countries to reduce deforestation. EPA would also be required to contract with the National Academy of Sciences (NAS) for preparation of a comprehensive report and recommendations on global climate change by July 1, 2014, and every 4 years thereafter. EPA would be required to take the appropriate actions identified by NAS in those reports.

Sec. 301 (Part B) would require EPA to establish a Federal GHG registry for reporting entities and vehicle fleets emitting more than more than 25,000 tons of carbon dioxide equivalent annually. In addition to the "covered entities", entities that would have been

[4] Fossil fuel-based carbon dioxide; nitrous oxide; perfluorocarbons; sulfur hexafluoride; any other fluorinated gas that is a GHG as designated by EPA (except for nitrogen trifluoride); or any combination.

[5] These would include adipic acid production; primary aluminum production; ammonia manufacturing; cement production, excluding grinding-only operations; hydrochlorofluorocarbon production; lime manufacturing; nitric acid production; petroleum refining; phosphoric acid production; silicon carbide production; soda ash production; titanium dioxide production; and coal-based liquid or gaseous fuel production.

[6] These include sources that manufacture acrylonitrile, carbon black, ethylene, ethylene dichloride, ethylene oxide, or methanol; or a chemical or petrochemical product that results in annual process emissions of 25,000 or more tons of carbon dioxide equivalent.

covered in 2008 or any subsequent year based on GHG emissions, entities emitting more than 10,000 tons of carbon dioxide equivalent, any entity that delivers electricity to an energy-intensive facility, and any other entities EPA designates, would be required to report. Eight GHGs[7] initially would be listed and any person could petition to add gases to the listing.

Sec. 301 (Part C) would establish a complex cap-and-trade program to be developed and administrated by EPA. The number of emission allowances (in millions) would start in 2012 at 4,627 and peak in 2016 at 5,482 and gradually decrease to 1,035 in 2050 and each year thereafter. Under the program, EPA would for each year beginning in 2012 issue: (i) emission allowances; (ii) compensatory allowances; (iii) strategic reserve allowances; and (iv) offset credits. Covered entities would be required to hold 1 allowance for each ton of carbon dioxide equivalent emitted directly or indirectly in the prior year, or alternatively satisfy their obligations through offset credits and international emission allowances from reduced deforestation. The exportation for sale or use of any petroleum-based or coal-based liquid fuel, petroleum coke, natural gas liquid, fossil fuel-based carbon dioxide, nitrous oxide, or fluorinated gas shall be exempt from this section. Covered entities can meet some of their allowance obligation by purchasing offsets. Failure to comply with requirements would subject owners or operators of covered entities to civil penalties. Allowances could be traded, banked or borrowed subject to specified restrictions. There is no restriction on who can hold an allowance (i.e., not limited to covered entities). EPA would hold quarterly auctions of "strategic reserve allowances" (1-3% of the pool), the proceeds of which would support international deforestation efforts. The initial strategic reserve auction price shall be $28 (in constant 2009 dollars).

Sec. 301 (Part D) would establish an independent "Offsets Integrity Advisory Board" and require EPA to establish an "Offsets Program" and registry to track approved projects and the offset credits generated by such projects. EPA would establish a list of approved projects that would reduce or avoid GHG emissions or sequestration of GHGs, and any person could petition to add or remove projects from the list. Random audits of offset projects, offset credit, and practices must be conducted as part of this program. EPA shall issue international offset credits to countries where the United States is a party to a bilateral or multilateral agreement related to GHG, such country is a developing country and such agreement or arrangement complies with the requirements of this section.

Sec. 301 (Part E) would authorize EPA to use emission allowances for an "International Deforestation Reduction Program."

Subtitle B—Disposition of Allowances.

Sec. 321 (Part H) would allocate emission allowances in the following manner:

[7] Carbon dioxide, methane, nitrous oxide, sulfur hexafluoride, hudrofluorocarbons emitted as a byproduct, any perflurocarbon, nitrogen trifluoride, and any other anthropogenic gas designated as a GHG by EPA under this section.

Electricity Consumers
43.75% in 2012 and 2013
38.89% in 2014 and 2015
35.00% in 2016 through 2025
28.00% in 2026
21.00% in 2027
14.00% in 2028
7.00% in 2029

Natural Gas Consumers
9.00% in 2016 through 2025
7.20% in 2026
5.40% in 2027
3.60% in 2028
1.80% in 2029

Home Heating Oil and Propane Consumers
1.875% in 2012 and 2013
1.67% in 2014 and 2015
1.50% in 2016 through 2025
1.20% in 2026
0.90% in 2027
0.60% in 2028
0.30% in 2029

Low Income Consumers
15.00% starting in 2012

Trade Vulnerable Industries
up to 2.00% in 2012 and 2013
up to 15.00% in 2014
up to the product of the amount established for 2014 multiplied by the quantity of allowances established for 2015 divided by the quantity of emission allowances established for 2014 in 2015
up to the product of the amount established for 2015 multiplied by the quantity of allowances established for 2016 divided by the quantity of emission allowances established for 2015 in 2016
up to the product of the amount established for 2016 multiplied by the quantity of allowances established for 2017 divided by the quantity of emission allowances established for 2016 in 2017 through 2025
up to the product of the amount established for 2016 multiplied by the quantity of emission allowances established for the applicable year during 2026 through 2050 divided by the quantity of emission allowances established for 2016 and multiplied by a factor, not

exceeding 100% that shall equal 90% for 2026 and decline 10% for each subsequent year until reaching zero

Deployment of CCS Technology[8]
1.75% in 2014 through 2017
4.75% in 2018 and 2019
5.00% in 2020 through 2050

Investment in Energy Efficiency and Renewable Energy
9.50% in 2012 through 2015
6.50% in 2016 and 2017
5.50% in 2018 through 2021
1.00% in 2022 through 2025[9]
4.50% in 2026 through 2050

Clean Energy Innovation Centers
1.5% in 2012 through 2025

Investment in Clean Vehicle Technology
3.00% in 2012 through 2017
1.00% in 2018 through 2025

Domestic Fuel Production
2.00% in 2014 through 2026

Investment in Workers
0.50% in 2012 through 2021
1.00% in 2022 through 2050

Domestic Adaptation
0.90% in 2012 through 2021
1.90% in 2022 through 2026
3.90% in 2027 through 2050
0.10% in 2012 and each year thereafter for the Climate Change Health Protection and Promotion Fund

Wildlife and Natural Resource Adaptation
0.385% in 2012 through 2021
0.77% in 2022 through 2026
1.54% in 2027 through 2050
0.615% in 2012 through 2021 for the Natural Resources Climate Change Adaptation Fund

[8] If EPA has not distributed all allowances, then carryover shall be permitted with EPA auctioning the unused allowances and increasing the allowance in the following year.
[9] At the same time the 2022 through 2025 allowances are distributed, 3.55% of allowances for the four years greater shall also be distributed.

1.23% in 2022 through 2026 for the Natural Resources Climate Change Adaptation Fund
2.46% in 2027 through 2050 for the Natural Resources Climate Change Adaptation Fund

International Adaptation
1.00% in 2012 through 2021
2.00% in 2022 through 2026
4.00% in 2027 through 2050

International Clean Technology Deployment
1.00% in 2012 through 2021
2.00% in 2022 through 2026
4.00% in 2027 through 2050

Release of Future Allowances
0.70 billion allowances in each of 2014 through 2019 with vintage years 12 to 17 years after the year of the auction
0.50 billion allowances in each of 2020 through 2025 with vintage years 12 to 17 years after the year of the auction
0.30 billion allowances in each of 2026 through 2030 with vintage years 12 to 17 years after the year of the auction

Deficit Reduction
Any allowances not designated for distribution or auction in 2012 through 2025 shall be auctioned and the proceeds shall be deposited into the Treasury

Climate Change Consumer Refund
Any allowances not designated for distribution or auction or not distributed by March 31 of the calendar year following the allowance's vintage year in 2026 through 2050

The section would establish the procedures for auction allowances. Requirements would include quarterly auctions beginning in 2011; a single-round, sealed-bid, uniform price format; opening the auction to any person subject to financial assurance requirements; disclosure of beneficial ownership of any bid; purchase limit of 5% of the allowances offered at that quarterly auction; and publication of winners of the auction. The minimum reserve auction price shall be $10 (in constant 2009 dollars) for auctions occurring in 2012, and the minimum reserve price for auctions occurring in years after 2012 shall be the minimum reserve auction price for the previous year increased by 5% plus the rate of inflation.

Subtitle C—Additional GHG Standards

Sec. 331 would require EPA to set additional emission standards within 1 year for stationary sources that have uncapped GHG emissions greater than 10,000 tons of carbon dioxide equivalent and in the aggregate are responsible for emitting at least 20% of uncapped GHG emissions. (Each source category that is responsible for 10% or more of uncapped methane emissions in 2005 would be included.) The additional standards would be phased in over 3 to 10 years. EPA may exempt substances solely for use in medical devices and substances solely for use in aviation safety.

Sec. 332 would establish a separate regulatory program for hydrofluorocarbons (HFC) not produced as a byproduct. The production and consumption of HFCs would be phased out 2.5% per year beginning with 90% of baseline in 2012.

Sec. 333 would require EPA to reduce emissions of black carbon (or soot). EPA would be required to establish new regulations and to study international mitigation opportunities for black carbon.

Secs. 334 and 335 would allow States to adopt and enforce their own additional GHG emissions standards unless such GHG were covered under an applicable implementation plan or was regulated under the CAA sections applicable to new stationary sources or hazardous air pollutants. States standards, however, would be suspended until 2018.

Sec. 336 would amend the CAA to allow a court to remand without vacatur an action by EPA that is deemed arbitrary, capricious or otherwise unlawful, and would require EPA to act on a petition for reconsideration within 150 days after the petition is received.

Sec. 337 would provide conforming amendments to the CAA.

Sec. 338 would require Davis-Bacon compliance in order to receive emission allowances.

Subtitle D—Carbon Market Assurance

Sec. 341 would establish the carbon market regulatory regime. "Regulated Allowance Derivative" means an instrument that is, or includes an instrument which is of the character of, or is commonly known to the trade as, a 'put option', 'call option', privilege', 'indemnity', 'advance guaranty', 'decline guaranty', or 'swap agreement'; or is a contract of sale for future delivery other than an offset creation contract; and the value of which, in whole or in part, is expressly linked to the price of a regulated allowance or another regulated allowance derivative. Enforcement measures include prohibition from trading, suspension of trading for a period of not more than 6 months, revocation of registration, $1,000,000 per day civil penalty, or disgorgement. Market manipulation and fraud associated with this market shall be punishable by a fine of not more than $25,000,000 (or $5,000,000 in the case of an individual) or imprisonment for not more than 20 years, or both. FERC shall collect transaction fees to cover the costs of the supervision and regulation of regulated allowance markets and market participants,

and such fees shall initially be set at a rate of not more than $15 per $1,000,000 of the aggregate dollar amount of sales of regulated allowances transacted through the facility. FERC shall file a report requesting additional employees in order to carry out this program. The President shall delegate authority to promulgate regulations for the establishment, operation and oversight of all markets for regulated allowance derivatives. Certain default rules for trading would be established: (1) an individual market participant or group working together cannot control more than 10% of the open interest in any regulated allowance derivative, and (2) all regulated allowance derivatives shall be traded on a regulated exchange.

Subtitle E—Additional Market Assurance

Sec. 351 would extend regulatory authority over certain energy commodities and energy derivatives and would eliminate the exemption for over-the-counter (OTC) swaps involving energy commodities. Detailed reporting and disclosure would be required, as well as limits to prevent excessive speculation in indexes.

Sec. 352 would amend the Commodity Exchange Act so that it would not affect the jurisdiction of FERC.

Sec. 353 would elevate the Inspector General of the CFTC by amending the Inspector General Act of 1978.

Sec. 354 would amend the Commodity Exchange Act to expand the scope of derivatives that would need to be cleared through a derivatives clearing organization registered with the CFTC.

Sec. 355 would amend the Commodity Exchange Act to prohibit naked credit default swaps[10].

Sec. 356 would establish clearing fees at rates to be determined at a future date by the CFTC.

Sec. 357 would declare that Subtitle E of this Act would have no impact on the jurisdiction or authority of the FTC.

Sec. 358 would amend the Commodity Exchange Act to give the CFTC jurisdiction over the carbon derivatives market, and would grant the President the authority to grant

[10] This would be done by adding three requirements for eligibility to purchase a credit default swap: (1) the person must own a credit instrument which is insured by the credit default swap, (2) the person would experience financial loss if an event that is the subject of the credit default swap occurs with respect to the credit instrument, and (3) the person meets minimum capital adequacy standards.

authority over the carbon derivatives market to another federal agency instead of the CFTC.

Sec. 359 would amend the Natural Gas Act to grant FERC cease-and-desist authority.

TITLE IV—TRANSITIONING TO A CLEAN ECONOMY

Title IV would seek to level the playing field for U.S. companies where U.S. compliance costs may cause "leakage" of jobs to other countries.

Subtitle A—Ensuring Real Reductions in Industrial Emissions

Sec. 401 would seek to prevent "leakage," which is defined to occur when increased production costs in the U.S. causes production to go to other countries. Owners and operators of facilities in eligible U.S. industrial sectors using large amounts of energy to produce globally traded commodities could receive relief in the form of rebates, or if these were ineffective, additional costs (in the form of international allowances) imposed on imports. The initial list of eligible industrial sectors would be published in the Federal Register by EPA not later than June 30, 2011. The petroleum refining sector shall not be an eligible industrial sector. Rebates should be distributed no later than October 31 of the preceding calendar year. EPA shall establish an "International Reserve Allowance Program" to address the competitive imbalance in the costs of producing or manufacturing primary products in industrial sectors related to the cost of compliance with this Title IV. Not later than January 1, 2018, the President shall submit a report to Congress on the effectiveness of the distribution of emission allowance rebates to mitigate carbon leakage in industrial sectors.

Subtitle B—Green Jobs and Worker Transition

Secs. 421 and 422 would authorize the Secretary of Education to award grants to develop programs of study focused on careers and jobs in renewable energy, energy efficiency, and climate change mitigation, and work with the Secretary of Labor to carry out workforce training and education in those areas.

Sec. 425 would establish the "Climate Change Worker Adjustment Assistance" program.

Sec. 426 would create benefits for workers adversely affected and outlines requirements for participation in the program. The payment shall be an amount equal to 70% of the average weekly wage of the worker and may extend for a period of not longer than 3 years. The program would also include training programs, one-time job search allowances up to $1,500 (at Secretary of Labor's discretion), and relocation allowances in a lump sum equal to 3 times the worker's average weekly wage of up to $1,500.

Subtitle C—Consumer Assistance.

Sec. 431 would amend the Internal Revenue Code of 1986 and create an energy tax credit. An individual would receive a credit against the tax, in an amount according to the following: (i) income of less than $6,000 shall receive the phase in rate times the applicable income, (ii) income that is greater than or equal to $6,000 and is less than or equal to the phase down amount shall receive the maximum energy tax credit, and (iii) income that exceeds the phase down amount, an amount equal to the maximum energy tax credit minus the difference between the individual's applicable income and the phase down amount multiplied by .2. The phase in rate shall be computed each year by the Secretary of the Treasury. The phase down amount shall be $20,000 for an individual filer and $25,000 in the case of a joint return.

Sec. 432 would establish an energy refund program for low-income consumers. The program would provide monthly energy refunds (not considered income for tax purposes).

Subtitle D—Exporting Clean Technology.

Secs. 441-446 would establish an "International Clean Technology Account" to provide financial assistance to developing countries for projects that deploy technologies that reduce GHG emissions. It would be administered by State, EPA, DOE, Treasury, USAID and any other head of a Federal agency that the President may designate.

Subtitle E—Adapting to Climate Change

Part 1-Domestic Adaptation: Subpart A--National Climate Change Adaptation Program

Secs. 451-453 would establish a "National Climate Change Adaptation Council" to coordinate federal agency policies relating to adapting to climate change. NOAA would establish a National Climate Service to develop climate information and data to distribute to State, local and tribal governments and the public. Allowances would be distributed to States based on the State's population and the State's allocation factor, which is the quotient of the per capita income of all individuals in the United States, divided by the per capita income of all individuals in such State. States would use funding for projects, programs, or measures designed to build resilience to the impacts of climate change.

Part 1-Domestic Adaptation: Subpart B—Public Health and Climate Change

Secs. 461-467 would require the Department of Health and Human Services to promulgate a national strategy for mitigating public health impacts of climate in the United States and prepare a report with the National Research Council and the Institute of Medicine. A "Climate Change Health Protection and Promotion Fund" would also be established in the Treasury.

Part 1-Domestic Adaptation: Subpart C—Natural Resource Adaptation

Secs. 471-482 would require the President to establish a "Natural Resources Climate Change Adaptation Panel" to develop and implement a strategy for assisting natural resources in becoming more resilient and adapting to the impacts of climate change and ocean acidification. Agencies would be required to integrate that strategy into agency planning and management of natural resources. Sec. 477 would require NOAA to establish a "National Climate Change and Wildlife Science Center" to be implemented through the U.S. Geological Survey and counterpart NOAA programs. These entities would be required to conduct surveys and provide technical assistance. A Science Advisory Board and a "Natural Resources Climate Change Adaption Fund" would also be created.

Part 2—International Climate Change Adaptation Program

Secs. 491-495 would require USAID in consultation with State, Treasury, and EPA to establish an "International Climate Change Adaptation Program" to provide assistance to developing countries.