

The American Power Act of 2010

Comprehensive Summary | June 2010



The *American Power Act* (APA), released as a discussion draft on May 12, 2010 by Senators John Kerry (D-MA) and Joseph Lieberman (I-CT), sets forth an ambitious and comprehensive reform of U.S. climate and energy policy. The following document provides: (1) a brief overview of APA; and (2) detailed section-by-section summaries. Additional issue-specific summaries and ENE recommendations for improvement of the efficiency, state authority, offsets and forestry provisions are [available on ENE's Federal Cap and Trade Web page](#).

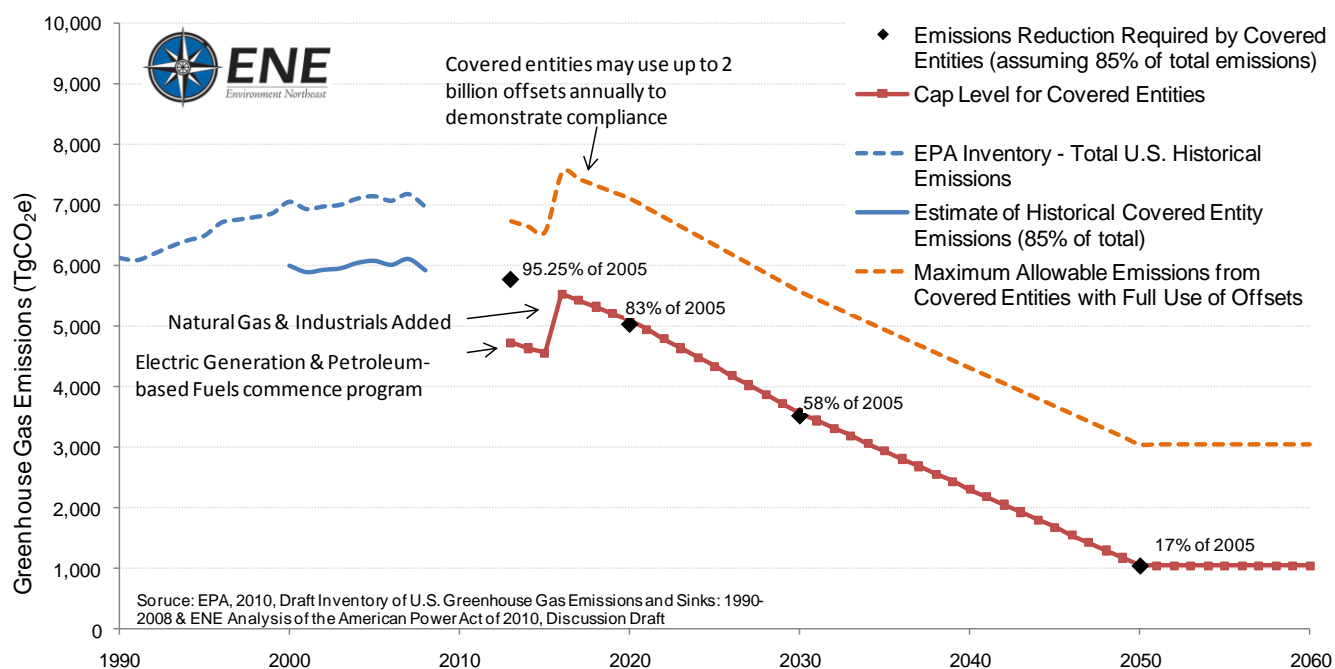
1. General APA Overview

GHG Cap and Trade Program

APA establishes a market-based cap and trade program that covers approximately 85% of domestic greenhouse gas (GHG) emissions from electricity generators, the transportation sector, large industrial emitters, and suppliers of petroleum-based fuels and natural gas. Coverage is limited to large entities (responsible for annual emissions >25,000 tons of carbon dioxide equivalent or CO₂e). Electric generating and industrial units are covered at the point of emission, petroleum-based fuels are covered at the point of production or importation, and natural gas is covered at the distributor level.

The APA emissions cap takes effect in 2013, covering electricity generators, petroleum-based fuel providers, refiners, and producers of other man-made GHGs (entities responsible for approximately 67% of total U.S. emissions). The cap takes in another 18% of U.S. emissions in 2016, when emissions related to natural gas distribution companies and “trade-exposed industries” come under the cap. From a 2005 baseline, emissions decline 4.75% by 2013, 17% by 2020, 42% by 2030, and 83% by 2050 (see Figure 1, below). The cap establishes numerical tonnage limits, which may be adjusted up or down if EPA revises the 2005 baseline or finds that covered sources are responsible for larger or smaller shares of emissions. Covered entities other than transportation fuel providers may use up to 2 billion domestic and international offsets (emissions reductions or increased sequestration from outside of the covered Sectors) to demonstrate compliance. After 2018, 1.25 international offsets must be used for each ton of emissions.

Figure 1: APA GHG Cap and Offsets in Relation to Historic Emissions

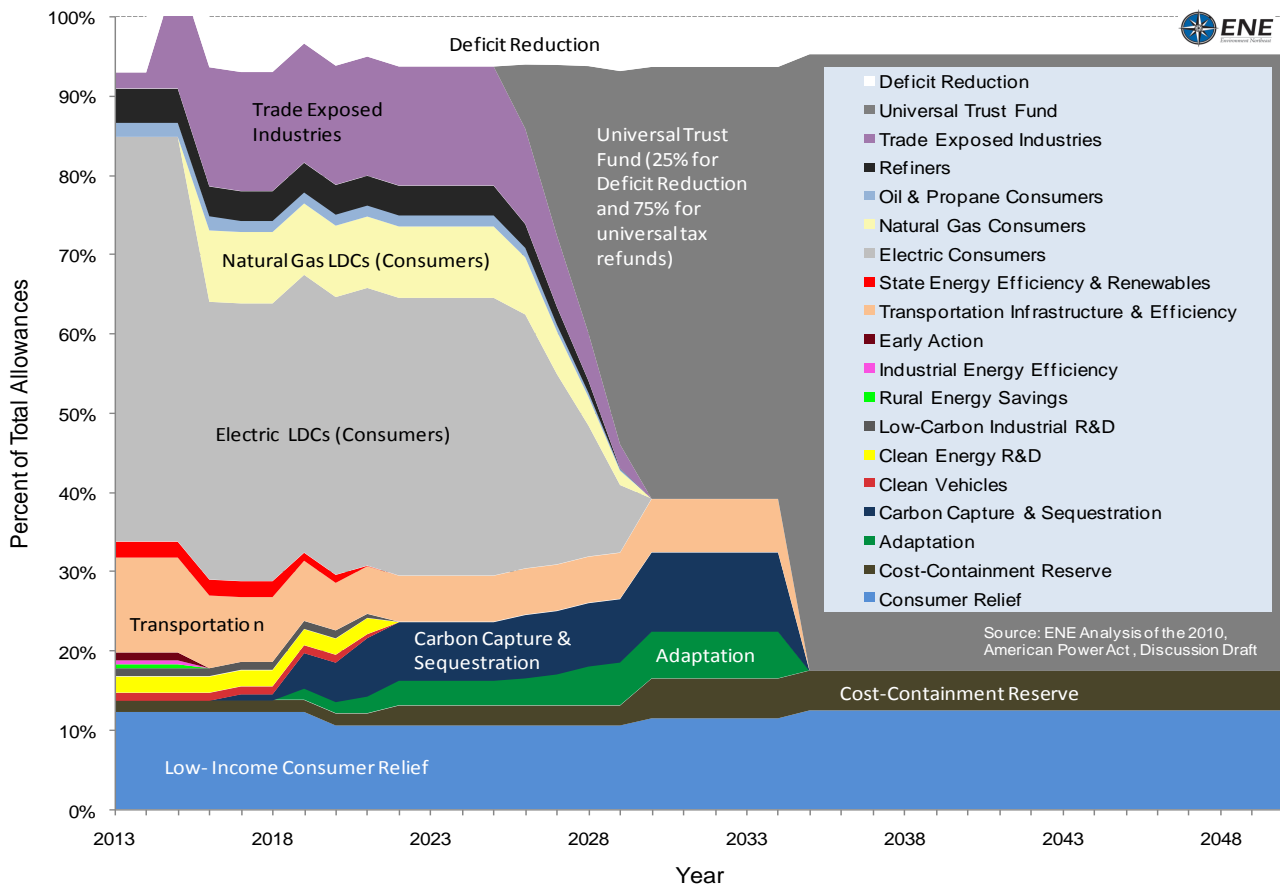


Covered entities other than petroleum-based fuel providers demonstrate compliance by submitting to EPA a quantity of allowances, offsets, or qualified international allowances equivalent to measured emissions in the previous year for which they are responsible. Providers of petroleum-based fuels must purchase from EPA on a quarterly basis a quantity of allowances equivalent to emissions from fuels introduced into domestic commerce in the previous quarter, based on estimates by the Energy Information Administration (EIA). Allowances are sold directly to petroleum-based fuel providers from the larger pool of auctioned allowances, at prices based on prior allowance auctions.

Allowance Allocations

Allowances (permits to emit) are both auctioned and distributed for free, with free allocations decreasing over time (see Figure 2, below). For the duration of the program approximately 12.5% of allowances are auctioned by the federal government to provide monthly refunds to low-income consumers. Out of the total 128 billion allowances from 2013-2050, four billion allowances are set aside for the cost-containment reserve (“price collar”). Remaining allowances are distributed to: emitters (large industrials, refineries, merchant coal plants, and power plants with long-term contracts); energy distributors on behalf of their ratepayers (local distribution companies, which may or may not own power plants, depending on local electricity markets); states; and, federal agencies. Recipients may auction allowances to raise revenue or use allowances for compliance, in the case of emitters and energy distributors. A significant portion of allowances – almost 50% in the early years – is allocated for the benefit of electric, natural gas, oil, and propane consumers. State utility regulators and EPA will interpret “consumer benefit” and determine whether allowances are used for compliance, for rebates, efficiency programs, or other investments. Unallocated allowances are used for deficit reduction, as is 1/4 of the Universal Trust Fund, which receives the vast majority of allowance value after free allocations wind down from 2025-2035. The other 3/4 of the Universal Trust Fund is used to provide consumer relief through rebates to U.S. taxpayers.

Figure 2: APA Allowance Allocations



APA permanently **preempts** state and regional GHG cap and trade programs, such as the Regional Greenhouse Gas Initiative (RGGI). States can continue with other GHG programs and policies, including fleet-wide motor vehicle emissions standards, emissions standards for fuels, and states could require retirement of allowances beyond what is required by APA. EPA is prohibited from regulating GHG emissions as criteria pollutants or hazardous air pollutants, and may not establish GHG performance standards for capped sources, except as required by the Act (i.e. new coal plants). In order to boost the supply of domestic offsets at the start of the program, EPA is prohibited from regulating GHG emissions from uncapped sources before 2020. New coal plants are required to meet strict GHG emissions standards (50% reduction for those built/permitted before 2020, 65% reduction thereafter), with requirements before 2020 dependent on the commercial deployment of carbon capture and sequestration (CCS) technology. EPA authority to establish vehicle emissions standards is preserved.

A number of **cost containment** elements are included in the bill:

- Regulated entities other than petroleum-based fuel providers may use 2 billion offsets each year, which would cover approximately 40%-45% of their emissions in early years, and greater portions in later years of the program.
- International Emission Allowances from systems deemed eligible by the EPA may be used for compliance.
- Banking of allowances is allowed without limitation, allowing buyers to retain unused allowances for future compliance.
- Allowances borrowed from up to 5 years into the future may be used to meet up to 15% of a covered entity's compliance obligation. Borrowing of allowances from 1 year ahead is allowed without interest, but to borrow allowances from 2-5 years into the future, the compliance entity must pre-pay an annual 8% interest rate at the time of usage, by submitting to EPA additional allowances equivalent to $0.08 \times$ [years into the future].
- A Strategic Reserve of allowances is available for covered entities to purchase at quarterly auctions; reserve allowances prices are initially set at \$25 per ton, increasing annually at 5% prices plus inflation. Revenue from the auction of strategic reserve allowances will be used to purchase offsets from avoided deforestation in the developing world. These offsets will then be discounted by 20% and converted to allowances to resupply the reserve.

Allowances are allocated to **energy- and emissions-intensive industries** susceptible to competition from foreign producers not operating under emissions constraints. The allocation is distributed based on manufacturing emissions and energy use, and phases out when over 70% of global producers in a given sector operate under emissions constraints. If direct allowance allocations fail to protect domestic industry, an international reserve allowance program can be created to incorporate carbon costs into the price of imported products.

Electricity

APA both includes incentives for conventional electricity sources, and provides support for clean energy technologies through allowance allocations. **Nuclear generation** is supported through tax incentives, loan guarantees and expedited permitting. A **Carbon Capture and Sequestration (CCS)** council oversees research and development of CCS technology, using approximately \$2 billion of funding collected from distribution utilities (based on the emissions rates of electricity sold), and incentives for deployment of the first 72 gigawatts of generation with CCS is supported through allowance value.

Clean energy technologies are supported through modest allowance allocations. Federal research and development of energy efficiency, renewable energy, nuclear power, water efficiency and transportation technology is supported through a 2% allocation in early years of the program. States receive allowances to

support energy efficiency and renewable energy, and support is provided for efficiency and low-carbon technologies in the industrial Sector.

Additional energy provisions relating to a renewable electricity standard, transmission planning, and energy research and development are included in the [American Clean Energy and Leadership Act](#) (ACELA), which could be included in a final Senate energy and climate package.

Transportation

Transportation efficiency and low carbon vehicle technologies are supported through the Act. EPA and the Department of Transportation will provide planning support to states and metropolitan planning organizations (MPOs) to reduce transportation GHG emissions through efficiency, with funding of up to \$1.875 billion annually from 2013-2034 provided through allowance allocations. DOE shall evaluate policies and investments needed to promote large-scale vehicle electrification. Additional allocations are provided for manufacturers of high-efficiency and electric vehicles, and tax and bond incentives are provided for natural gas vehicles.

Offshore Oil and Gas

Revenue-sharing incentives are created to promote the development of oil and gas resources in coastal waters, but a moratorium on new development is established until the causes of the Deepwater Horizon oil spill are investigated and adequate safeguards and liability funding mechanisms are established. Increased offshore oil and gas development is promoted by allowing states to retain 37.5% of profits. States may prohibit development within 75 miles of shore, and may prohibit development in other state waters based on potential impacts identified in studies by the Department of Interior (DOI).

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Environment Northeast is a nonprofit research and advocacy organization focusing on the Northeastern United States and Eastern Canada. Our mission is to address large-scale environmental challenges that threaten regional ecosystems, human health, or the management of significant natural resources. We use policy analysis, collaborative problem solving, and advocacy to advance the environmental and economic sustainability of the region.

2. Detailed APA Summary

TITLE I	Domestic Clean Energy Development
Subtitle A	Nuclear Power
Part I	Encouraging Domestic Nuclear Power Generation
Sec. 1101 – Sec. 1109	<ul style="list-style-type: none"> • Nuclear Regulatory Commission (NRC) shall recommend means of streamlining permit review for new nuclear reactors • Increases loan guarantee program to \$54 billion • Provides regulatory risk assurance of up to \$500 million for up to 12 new reactors • The Department of Energy (DOE) shall oversee research and development of nuclear fuel reprocessing • Amends the Atomic Energy Act of 1954 to streamline hearings for non-contested issues • Allows NRC members to extend time of service in the event of delayed replacement • DOE shall develop a 5 year research plan on cost-reduction, small-scale and modular reactors, licensing, and proliferation controls • Amends Atomic Energy Act of 1954 to provide for supplemental environmental reviews for reactors seeking extension of operating permits
Part II	Extension of Duty Suspension for Certain Nuclear Parts
Sec. 1111	<i>Suspension of Duty on Certain Components Used in Nuclear Facilities:</i> extends import tariff suspension for 10 years on nuclear plant components not available in the U.S.
Part III	Tax Provisions
Sec. 1121 – Sec. 1126	<ul style="list-style-type: none"> • Reduces to 5 years the accelerated depreciation credit • 10% investment tax credit for nuclear plant construction • Expands advanced energy project credit to nuclear facilities • Allows public-private partnerships to use tax-exempt bonds to finance new nuclear plants • Provides grants equivalent to 10% of qualified expenditures in lieu of tax credits
Subtitle B	Offshore Oil and Gas
Sec. 1202	<i>Revenue Sharing for Outer Continental Shelf Areas in Certain Coastal States</i> <ul style="list-style-type: none"> ○ States shall receive 37.5% of any oil & gas royalty, rent, or other payments, with 20% of that amount going to political subdivisions of the state along the coast ○ 12.5% of any oil & gas royalty, rent, or other payments to the Land and Water Conservation Fund ○ Remaining revenue to deficit reduction
Sec. 1203	<i>Revenue Sharing from Areas Seaward of Alaska:</i> authorizes revenue sharing for Alaskan coastal waters, with 33% of Alaskan state share going to native regional corporations
Sec. 1204	<i>Reservation of Lands and Rights:</i> States may choose to prohibit leases within 75 miles of coast, through state legislation and petition by the state, which shall be granted
Sec. 1205	<i>Impact Studies:</i> Department of Interior (DOI) shall study potential environmental impact of offshore oil spills in areas opened to new development; based on findings, directly impacted states may veto development
Subtitle C	Coal
Part I	National Strategy for Carbon Capture and Sequestration
Sec. 1401	<i>National Strategy:</i> EPA in collaboration with DOE and other agencies shall develop a

	report setting out a unified and comprehensive strategy for carbon capture and sequestration (CCS) that addresses the key legal and regulatory barriers to commercialization
Sec. 1402	Studies and Reports: EPA-led task force shall study applicability and suitability of existing laws and regulatory authority over risk management, financial responsibilities and environmental liabilities of CCS and CO ₂ transportation
Part II	Carbon Capture and Sequestration Deployment
Sec. 1411 – Sec. 1420	Creates a Carbon Capture and Sequestration Program Partnership Council to fund and accelerate the commercialization of CCS through large scale projects (over 100MW); funding through a fee on electricity delivered by an electric distribution company that is indexed to the carbon intensity of energy provided, and designed to deliver funding of ~\$2 billion per year
Part III	Commercial Deployment of Carbon Capture and Sequestration Technologies
SECTIONS BELOW THAT AMEND THE CLEAN AIR ACT ARE MARKED “CAA”	
Sec. 1431 (CAA 794)	Commercial Deployment of CCS Technologies: <ul style="list-style-type: none"> Amends the Clean Air Act to direct EPA to distribute allowances allocated under Section 781(c)(1) to large electric and industrial CCS facilities (>200MW) Funding through allowance allocations for capture and sequestrations for first 72 gigawatts of generation, with higher allocations for higher levels of sequestration
Sec. 1432 (CAA 789)	Carbon Capture and Sequestration Deployment Studies: Comptroller General shall recommend means of overcoming barriers to CCS; DOE may direct EPA to increase allocation to CCS by not more than 2.5% of total allowances annually, with allowances drawn from deficit reduction allocation
Part IV	Performance Standards
Sec. 1441 (CAA 800)	Performance Standards for Coal-fired Power Plants: Plants permitted after 2020 shall reduce emissions 65%; plants permitted before 2020 shall reduce emissions 50%, within 4 years after 10 gigawatts of generation with CCS come online
(CAA 802)	Coal-Fueled Fleet Transition Program: provides investment tax credits for existing coal plants to install non-CCS technologies to improve efficiency and reduce emissions [Section is incomplete]
Subtitle D	Renewable Energy and Energy Efficiency
Sec. 1601	Renewable Energy and Energy Efficiency: establishes that the deployment of large-scale renewable energy and substantial improvement in energy efficiency are critical to the purposes of the Act (additional energy efficiency and renewable energy provisions are included in the American Clean Energy and Leadership Act passed by the Senate Energy and Natural Resources Committee on 6/16/09)
Sec. 1602	Rural Energy Savings Program: Amends Subtitle D of the Consolidated Farm and Rural Development Act to create loans and limited grants for cost-effective energy efficiency programs run by public power companies and rural electric coops
Sec. 1603	Support of State Renewable Energy and Energy Efficiency Programs <ul style="list-style-type: none"> Distribution of allocation: 0.5% competitively among Indian tribes; remainder to states: 1/3 equally among the 50 states, 1/3 based on population, and 1/3 based on energy consumption Allowable uses: energy efficiency programs, renewable technology deployment, smart grid technology, or surface transportation projects (up to 10%) Prioritizes existing efficiency program expansion and requires supplementing not

	supplanting existing programs
Sec. 1604	<i>Voluntary Renewable Energy Markets:</i> statement of policy that the Act shall seek to preserve existing voluntary renewable energy markets; GAO report on means of encouraging growth of voluntary renewable energy markets
Subtitle E	Clean Transportation
Part I	Electric Vehicle Infrastructure
Sec. 1701	<i>National Transportation Low-Emission Energy Plan; Pilot Program:</i> DOE to assess infrastructure and standards needed to promote electric drive vehicles; authorizes development of pilot programs; placeholder language for appropriations
Part II	Transportation Efficiency
Sec. 1711 (CAA 803)	<i>Greenhouse Gas Emissions Reductions through Transportation Efficiency:</i> EPA and Department of Transportation (DOT) shall support states and metropolitan planning organizations (MPOs) in the development of plans to reduce GHG emissions from surface transportation through efficiency improvements, reduction in vehicle miles travelled, and reduced GHG emissions from transport fuels
Sec. 1712	<i>Investing in Transportation Greenhouse Gas Emission Reduction Programs:</i> DOT shall distribute proceeds from the sale of allowances allocated under Section 781(f)(3) to states and MPOs to support the implementation of plans to reduce GHG emissions through transportation efficiency; 10% of allocation to MPOs, based on population; remainder of funds distributed competitively among states and MPOs based on emissions reductions, cost-effectiveness, increased mobility, and other factors of plan; allowance revenue of up to \$1.875 billion annually from 2013-2034
Part III	Highway Trust Fund
Sec. 1721 (CAA 785)	<i>Augmenting Highway Trust Fund:</i> proceeds from the sale of allowances allocated under Section 781(f)(1) to the Highway Trust Fund; allowance revenue of up to \$2.5 billion annually from 2013-2034
Subtitle F	Clean Energy Research and Development
Sec. 1801	<i>Clean Energy Research and Development:</i> supports research and development of renewable energy, energy efficiency, transmission, smart grid, water efficiency, and electric vehicle technologies; supported with 2% of annual allowances from 2013-2021 under Section 781(c)(4)
TITLE II	GREENHOUSE GAS POLLUTION REDUCTION
Subtitle A	Reducing Greenhouse Gas Pollution
Sec. 2001	<i>Reducing Global Warming Pollution:</i> Amends the Clean Air Act with the following: <ul style="list-style-type: none"> • Emission reduction requirements: <ul style="list-style-type: none"> ○ National greenhouse gas emissions shall achieve the following levels(CAA 702): <ul style="list-style-type: none"> ▪ In 2012 emissions shall not exceed 95.25% of 2005 emissions levels ▪ In 2020 emissions shall not exceed 83% of 2005 emissions levels ▪ In 2030 emissions shall not exceed 58% of 2005 emissions levels ▪ In 2050 emissions shall not exceed 17% of 2005 emissions levels ○ Emissions sources covered by the cap shall achieve the same reductions in emissions following the schedule above (CAA 703) ○ Authorizes supplemental program to achieve an additional 10% reduction in emissions from 2005 levels through investment in programs to reduce

deforestation in developing countries; funding through sale of cost containment reserve allowances (CAA 704)

- Scientific Review: every 4 years the EPA shall undertake a review of the latest scientific and technological information, status of domestic and international GHG reduction efforts, and make broad recommendations, including increasing the quantity of additional reductions needed to achieve the goals of this Act; placeholder language for appropriations (CAA 705)
- **Greenhouse Gases Regulated:** carbon dioxide, methane, nitrous oxide, sulfur hexafluoride, hydrofluorocarbons emitted as byproduct (separate program for direct HFC emissions), perfluorocarbon, nitrogen trifluoride, and any other gas determined by EPA, in consultation with Scientific Advisory Board, to be a greenhouse gas (CAA 711); initial carbon dioxide equivalent (CO₂e) values for GHGs listed (CAA 712)
- **Greenhouse Gas Registry** (CAA 713):
 - Entities that must report: any entity covered by the cap and trade program and entities that emitted over 25,000 tons of carbon dioxide equivalent (CO₂e) in years prior to 2009, entities that emit over 25,000 tons of CO₂e in subsequent years, vehicle fleets that emit over 25,000 tons of CO₂e in a year, entities that sold petroleum-based or coal-based liquid fuels, biofuels, or natural gas liquid that contains more than 25,000 CO₂e
 - Reporting required for the years 2007 to 2010 by March 31, 2011; subsequent data reported within 60 days of the end of a quarter; data to be available as soon as practicable over the Internet
- EPA to determine whether emissions of perfluorocarbon and other nonhydrofluorocarbons should be included in cap and trade system of regulated through performance standards (CAA 714)
- **Emissions Allowances:** the quantity of emissions allowances issued in each year is established, with an opportunity for EPA to adjust quantities if they prove to inaccurately represent emissions from covered entities (CAA 721)
- **Compensatory Allowances:** a separate allowance type is created for: the destruction of fluorinated gases, if emissions allowances were retired for their production and they are required to be destroyed under other laws; the non-emissive use of fossil fuel as feedstock, if allowances were retired for the GHGs that would have been emitted from their combustion; the consumptive use of fluorinated gases in production processes, if emissions allowances were retired for their production; international aviation by carriers whose emissions are covered by other GHG reduction programs, in order to avoid double-counting
- **Compliance Obligation** (CAA 722 & 700):
 - Each year (April) covered entities must hold a quantity of emissions allowances, qualified international allowances, offsets, or compensatory allowances equivalent to the quantity of emissions in the previous calendar year; allowances shall be retired by EPA
 - **Covered Entities:** any electricity source, entity that emits directly or produces/imports liquid fuels equivalent to over 25,000 tons of CO₂e emissions per year, or specific industrial sources (see Sec. 700, definition of Covered Entity for details):
 - Fuel producers and importers: responsible for each ton of CO₂e that will be emitted from the combustion of any petroleum based or coal based liquid fuel, petroleum coke, or natural gas liquids produced or imported by the entity starting in 2013
 - Fluorinated gas producers and importers: responsible for each ton of CO₂e from fluorinated gases produced or imported by the entity starting

in 2013

- Electricity sources: responsible for each ton of CO₂e emitted by the entity, excluding those from fuel producers and importers, renewable biomass, and fluorinated gases starting in 2013
 - Geological sequestration sites: responsible for each ton of CO₂e emitted by the entity starting in 2013
 - Industrial stationary sources: responsible for each ton of CO₂e emitted by the entity, excluding those from fuel producers and importers, renewable biomass, and fluorinated gases starting in 2016
 - Industrial fossil fuel-fired combustion devices: responsible for each ton of CO₂e emitted by the entity, excluding those from fuel producers and importers, renewable biomass, and fluorinated gases starting in 2016
 - Natural gas distribution companies: responsible for each ton of CO₂e that will be emitted from the combustion of natural gas delivered starting in 2016, excluding deliveries to covered entities
- **Penalties:** entities who fail to hold sufficient allowances shall pay a penalty for each allowance that they should have submitted to EPA equal to two times the last auction clearing price for earliest vintage allowances, and shall retire allowances equal to excess emissions in the following year(s) (CAA 723)
 - **Trading:** allowances may be traded by registered parties on exchanges regulated by CTFC (CAA 724, see subtitle E for additional detail)
 - **Banking:** allowances may be banked for use in subsequent years (CAA 725)
 - **Borrowing:** allowances may be used for the calendar year one year before the vintage year of the allowance without penalty; a covered entity may borrow allowances from up to 5 years in the future at 8% annual interest to cover up to 15% of their emissions (CAA 725)
 - **Offsets Usage for Compliance (CAA 722):**
 - Up to 2 billion offsets may be used by compliance entities other than petroleum-based fuel providers each year, with 1 offset required for each ton of emissions; after 2018, 1.25 international offsets are required for each ton of emissions
 - Individual entities are limited in their use of offsets by the following formula:
[Total individual entity emissions / total of all covered entity emissions] * 2 billion
 - This means that offsets may be used for approximately 43% of the compliance obligation for a covered entity (other than petroleum-based fuel provider) in early years, with the percentage of compliance increasing over time
 - International offsets limited to 25% unless EPA determines that less than 1.5 billion domestic offsets are available, in which case the limit can increase up to 1 billion
 - **Cost Containment Reserve (CAA 726):**
 - EPA will set aside 4 billion allowances (1.5% 2013-2021, 2.5% 2022-2029, 5% 2030-2050) for reserve and will auction reserve allowances quarterly to regulated entities only when allowance prices exceed the reserve threshold
 - The minimum auction price for reserve allowances initially set at \$25/ton, increasing annually at 5% plus inflation;
 - Regulated entities can only purchase allowances from the reserve for up to 15% of their emissions in the year of sale, and must use such allowances that year (no banking or resale of reserve allowances)
 - Any unsold allowances deposited in reserve
 - Revenue from the auction shall be used to invest in international offsets that reduce deforestation, with offsets converted to allowances at a 20% discount and those allowances deposit back in the reserve
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	<ul style="list-style-type: none"> • International Allowances (CAA 728): qualified international allowances may be used if approved by EPA, in consultation with the Secretary of State, if the international program has a mandatory absolute tonnage cap and is at least as stringent as the U.S. program, including qualitative and quantitative offset controls • Compliance for Transportation Fuels and Refined Petroleum Products (CAA 729): providers of refined products shall purchase allowances from EPA within 30 days of the end of each quarter beginning in 2013 in quantities equivalent to EIA estimate of emissions from petroleum-based fuels in prior quarter; the price of allowances shall be based on the market clearing price for allowances at the most recent auction or auctions; allowances may not be banked, traded, borrowed or resold; unsold allowances shall be offered at subsequent sales; not later than 2033 EPA and DOE shall review allowance distribution method for transportation fuels
Part D	Offset Credit Program for Domestic Emission Reductions
Sec. 2001 (CAA 731)	Definitions: defines the Secretary of Agriculture as the appropriate lead official for any domestic agriculture or forestry offset projects and the Administrator of the EPA as the appropriate lead official for all other offset projects
Sec. 2001 (CAA 732)	<p>Advisory Committee</p> <ul style="list-style-type: none"> • Provides scientific and technical advice on the establishment and implementation of the offset program • 9-15 individuals selected jointly by USDA and EPA • Made up of academics, business, NGO, government or experts in agriculture or forestry • Provides recommendations regarding eligible offset projects types and methodologies, giving initial consideration to projects types in Sec. 734 • Provides recommendations on additionality, leakage, uncertainty, measurement and verification, reserves and insurance, and administrative costs • EPA and USDA must respond to Committee reports and explain deviations from their recommendations • Every 5 years the Committee will submit a public report reviewing methodologies, evaluating net emissions effects of the program, and recommending changes
Sec. 2001 (CAA 733)	<p>Establishment of Domestic Offsets Program: USDA and EPA promulgate regulations to establish offset program</p> <ul style="list-style-type: none"> • Offsets must be additional, measurable, verifiable and enforceable, and equivalent to an emissions allowance • Establishes a process for public comment • Rules should ensure consistent requirements and procedures of projects types under the jurisdiction of USDA and EPA • EPA shall establish an offset registry • Establishes USDA as the lead agency under Sec. 734, 735, 736 and 739
Sec. 2001 (CAA 734)	<p>Eligible Projects</p> <ul style="list-style-type: none"> • If project types differ from Advisory Committee recommendations, requires USDA or EPA to provide an explanation • Provides a list of 14 main project categories that shall be included on the list • USDA or EPA may add or remove eligible project types by regulation • Project types can only be removed if they become required by law, are determined to cause environmental harm, have become predominant, or do not generate emissions reductions • Any person may petition to have a project type added or removed

Sec. 2001 (CAA 735)	<p>Requirements for Offset Projects</p> <ul style="list-style-type: none"> • Standardized methodologies or performance standards (not case-by-case) • To be additional, projects must exceed legal requirements, commence after Jan. 1, 2009 (except for early offset supply), and exceed the activity baseline • The activity baseline must reflect a conservative estimate of business-as-usual performance, but USDA may establish a historical baseline for agriculture and forest projects that allows for the continuation of existing practices • Leakage must be accounted for and mitigated • All reversals must be accounted for, and projects must use an offset reserve, insurance or other mechanisms to enable replacement • EPA will hold offset reserve credits in the offset registry • Any reversals will be fully replaced by credits in the reserve • Intentional reversals shall replace 1.5 offsets for each 1 offset lost • Unintentional reversals shall 0.5 offsets for each 1 offset lost, with provisions for undue hardship • USDA shall establish rules governing duration, liability, sequential contracts and easements to ensure the integrity of reductions from agriculture and forest projects • The crediting period is 30 years for forestry projects, and 5-10 years for other types • Receipt of payment for other benefits, such as conservation payment, shall not disqualify a potential offset project • Land management projects must avoid the conversion of native habitat to non-native species and cannot use invasive species
Sec. 2001 (CAA 736)	<p>Approval of Offset Projects: appropriate agency has 30 days to approve a petition; accredited third-party verifiers may be used during the approval process; establishes a non-binding voluntary pre-approval review process</p>
Sec. 2001 (CAA 737)	<p>Verification of Offset Projects</p> <ul style="list-style-type: none"> • Verification will include quantity of emissions reductions, methodologies and certification that the project meets requirements • The appropriate agency has 90 days to determine verified reductions • Establishes a process to accredit third-party verifiers, including use of ANSI standards • Allows USDA and EPA to establish joint accreditation standards
Sec. 2001 (CAA 738)	<p>Issuance of Offset Credits: EPA, in consultation with USDA on domestic forestry and agriculture projects, shall issue offset credits and register each project and credit with a unique serial number.</p>
Sec. 2001 (CAA 739)	<p>Audits and Reviews: annual audit and review of a representative sample of projects by appropriate agency: results publicly available on an aggregated basis</p>
Sec. 2001 (CAA 740)	<p>Early Offset Supply</p> <ul style="list-style-type: none"> • EPA in conjunction with USDA will approve regulatory or voluntary greenhouse gas emission offset programs as sources of qualified early offsets • USDA and EPA will approve programs that: <ul style="list-style-type: none"> ○ were established prior to January 1, 2009, ○ have approved protocols and methodologies that have gone through a public peer review process ○ require credits to be measurable, additional, verifiable, enforceable and permanent ○ require verification by state agency or accredited third-party verifier ○ register credits in public registry • USDA and EPA may determine that a specific project type in an approved program does

	<p>not meet requirements, and also may revoke approval of a program if it does not meet the above standards</p> <ul style="list-style-type: none"> • Credits given only for crediting period that commences prior to rules being issued under this Section, for no more than a 10 year crediting period • Offset project must have commenced after January 1, 2001, and credits may be issued for reductions occurring after January 1, 2004
Sec. 2001 (CAA 741)	<p><i>Productivity Study; Program Review and Revision</i></p> <ul style="list-style-type: none"> • USDA shall conduct an annual study of agricultural land removed from production due to afforestation projects • USDA may limit enrollment of new projects if serious adverse effects to agriculture are detected • EPA, in consultation with USDA shall review the 5-year report by the Advisory Committee on project types, methodologies, reversal requirements and other requirements and EPA and USDA shall review program provisions as appropriate
Sec. 2001 (CAA 742)	<p><i>Additional Regulatory Standards for Emission Reductions</i></p> <ul style="list-style-type: none"> • Program does not authorize the EPA to promulgate additional regulatory standards for emissions from offset activities • Emissions from methane offset projects will not be required to hold allowances • Emissions under the offset program shall not be subject to any other limitation under federal law regulating greenhouse gas emissions
Part E	Offset Credit Program for International Emission Reductions
Sec. 2001 (CAA 752)	<p><i>International Offsets Integrity Advisory Committee</i></p> <ul style="list-style-type: none"> • May share membership or coordinate with the domestic offset Advisory Committee • Members appointed by EPA • Provides recommendations regarding eligible offset projects types and methodologies • Conducts a scientific review of international offset and deforestation reduction programs pursuant to Section 732(d)(2)(D)
Sec. 2001 (CAA 753)	<p><i>Establishment of International Offsets Program</i></p> <ul style="list-style-type: none"> • EPA will establish the offset program in consultation with the State Department and USAID • Offsets must be additional, verifiable, enforceable, and permanent • EPA may issue credits only if the project is located in a country with which the US: 1) has a bilateral or multilateral agreement with certain conditions; and 2) is a developing country, as defined by the Organization for Economic Cooperation and Development • EPA may establish categories of offsets beyond what is described in Sec. 756 if 1) the allowance price reaches the containment reserve auction price for 2 consecutive years; and 2) the total limit on international offsets is not exceeded • Supplemental categories must occur in countries with a low-carbon development plan and must adequately address leakage, additionality and permanence
Sec. 2001 (CAA 754)	<p><i>Eligible Project Types</i></p> <ul style="list-style-type: none"> • If the list of project types differs from the Advisory Committee recommendations, EPA must explain reason for difference • EPA has 1 year to establish an initial eligibility list • EPA may add or remove eligible project types by rule, and must at a minimum consider project types proposed by petition or by the Advisory Committee
Sec. 2001	<i>Requirements for International Offset Projects</i>

(CAA 755)	<ul style="list-style-type: none"> • Standardized methodologies • In order to be additional, projects must exceed legal requirements, commence after Jan. 1, 2009 (except for early offset supply under Sec. 740), exceed the activity baseline, and not receive other support under this Act • The activity baseline must reflect a conservative estimate of business-as-usual performance • Leakage must be accounted for and mitigated • All reversals must be accounted for, and projects must use an offset reserve, insurance or other mechanisms to enable replacement, and EPA will develop mechanisms to deter repeated intentional reversals • EPA will ensure offset activities are not used for host country compliance obligations • Projects based on the destruction of hydrofluorocarbons are not eligible • The crediting period shall not exceed 20 years for forestry projects
Sec. 2001 (CAA 756)	<p><i>Categories of International Offset Credits</i></p> <ul style="list-style-type: none"> • EPA, in consultation with the State Department and USAID will establish Sector-based credits for activities 1) in countries with high levels of GHG emission; 2) in Sectors that would have a compliance obligation were they in the U.S.; and 3) considering factors such as the risk of leakage from project-based credits • EPA may issue offset credits in exchange for credits issued under the UNFCCC or its successor, if such credits meet or exceed the offset standards under this program, and if the activity is not in a sector with sector-based credits • EPA may issue credits from reduced deforestation only in countries that have the technical and institutional capacity to support forest offsets, have developed plans to reduce deforestation, and if reductions are measured against a national baseline • Reduced deforestation credits must be managed in a way to improve the lives of local communities, maintain biodiversity, and promote or restore native ecosystems • EPA, the State Department and USAID shall ensure offset-providing countries protect the rights of local and indigenous communities, consult with communities in affected areas, and encourage sharing offset profits with such communities. • National deforestation baselines must establish a trajectory resulting in no net deforestation within 20 years • EPA, with the State Department and USAID, may also identify states and provinces where deforestation activities can generate credits compared to a state or province level baseline, if efforts are underway to transition to a national program within 5 years.
Sec. 2001 (CAA 757)	<p><i>Approval of Offset Projects:</i> EPA has 90 days to approve a petition, and must make the petition, and any reason for denying the petition, publicly available</p>
Sec. 2001 (CAA 758)	<p><i>Verification of Offset Projects</i></p> <ul style="list-style-type: none"> • Establishes verification protocols and third-party verifiers according to the provisions laid out in Section 737 of the domestic offset program • The appropriate agency has 90 days to determine verified reductions • Establishes a process to revoke the accreditation of third-party verifiers
Sec. 2001 (CAA 759)	<p><i>Issuance of Offset Credits:</i> EPA shall issue offset credits pursuant to Section 738 of the domestic offset program</p>
Sec. 2001 (CAA 760)	<p><i>Audits:</i> EPA will conduct audits pursuant to Section 739 of the domestic offset program</p>
Sec. 2001 (CAA 761)	<p><i>Program Review and Revisions:</i> At least every 5 years EPA, taking into account recommendations from the Advisory Committee, will review, update and revise: 1) the list of</p>

	eligible project types; 2) methodologies; 3) reversal requirements; and 4) other requirements
Sec. 2001 (CAA 762)	<i>Environmental Considerations:</i> For land management and forestry projects EPA must promulgate regulations to ensure: 1) the use of native species; 2) enhancement of biodiversity; 3) prohibition of invasive species; 4) use of sustainable forest practices; 5) prohibitions on conversion of native ecosystems; and 6) that credits would, to the extent possible, meet requirements of the UNFCCC or successor agreements
Sec. 2001 (CAA 763)	<i>Incorporation by Reference:</i> References to the Part D domestic offset programs should replace references to “appropriate official” or the Secretary of Agriculture with the Administrator of the U.S. EPA, thus establishing EPA as the lead agency on international offsets.
Subtitle B	Disposition of Allowances
Sec. 2101 (CAA 781)	<p><i>Disposition of Allowances for Global Warming Pollution Reduction Program:</i> allocates allowances to the entities and programs in the following amounts:</p> <ul style="list-style-type: none"> • Cost-containment reserve: EPA shall withhold 4 billion allowances to fill the cost-containment reserve created in CAA 726; allowances withheld in the following quantities: 1.5% from 2013-2021; 2.5% from 2022-2029; 5% from 2030-2050 • Electric consumers (LDCs and merchant generators): 51% from 2013-2015; 35% from 2016-2025; declining to 0% by 2030; distributed in accordance with CAA 782 • Natural gas consumers (LDCs); 9% from 2016-2025; declining to 0% by 2030; distributed in accordance with CAA 783 • Home heating oil and propane consumers: 1.9% from 2013-2015; 1.5% from 2016-2025; declining to 0% by 2030; distributed in accordance with CAA 784 • Consumer relief: 12.3% from 2013-2019, distributed in accordance with Sec. 3204 and Sec. 3202(a); 10.6% of allowances from 2020-2029, distributed in accordance with Sec. 3204 and Sec. 3202(a); 11.5% from 2030-2034, distributed in accordance with Sec. 3204; 12.5% from 2035 onward, distributed in accordance with Sec. 3204 • Universal Trust Fund: 8.1% in 2026; 21.5% in 2027; 33.7% in 2028; 47.1% in 2029; 54.5% from 2030-2034; 77.8% from 2035 onward; distributed in accordance with Sec. 3206 • Trade-exposed industries: 2% from 2013-2015; 15% from 2016-2025; declining to 0% by 2030; distributed in accordance with CAA 774 • Industrial energy efficiency: 0.5% from 2013-2015, up to an annual maximum of \$1.55 billion; 96.77% distributed in accordance with Part E of title III of the Energy Policy and Conservation Act, 3.23% distributed in accordance with Sec. 25(f) of National Institute of Standards and Technology Act • Refiners: 4.3% from 2013-2015; 3.75% from 2016-2025; declining to 0% by 2030; distributed in accordance with CAA 785 • Carbon capture and sequestration: 0.8% from 2017-2018; 4.5% in 2020; 5% in 2021; 7.4% from 2022-2025; 8% from 2026-2029; 10% from 2030-2034; distributed in accordance with CAA 794 • Clean vehicle technology: 1% from 2013-2020; 0.5% in 2021; distributed in accordance with Sec. 4111 • Low-carbon industrial technologies research and development: 1% from 2013-2020; 0.5% in 2021; distributed in accordance with Sec. 4143 • Clean energy technology research and development: 2% from 2013-2021; distributed in accordance with Sec. 1801 • Energy efficiency and renewable energy: 2% from 2013-2018; 1% from 2019-2020; 0.5% in 2021; distributed in accordance with Sec. 1603(b)

	<ul style="list-style-type: none"> • Rural energy savings program: 0.5% from 2013-2015, up to an annual maximum of \$1 billion; distributed in accordance with Sec. 1602 • Adaptation: 1.5% in 2019-2020; 2.2% in 2021; 3.2% from 2022-2025; 3.5% in 2026; 4% in 2027; 5% in 2028; 5.5% in 2029; 6% from 2030-2034; one-half distributed domestically according to title VI; one-half distributed internationally according to Sec. 5005 • Early action: 1% from 2013-2015; distributed according to CAA 788 • Transportation and infrastructure efficiency: 12% from 2013-2015; 9.2% in 2016; 8.2% from 2017-2018; 7.6% in 2019; 6% from 2020-2021; 5.8% from 2022-2029; 6.7% from 2030-2034; one-third, up to an annual maximum of \$2.5 billion distributed according to CAA 785; one-third, up to an annual maximum of \$1.875 billion distributed according to title XII of division A of American Reinvestment and Recovery Act of 2009; one-third, up to an annual maximum of \$1.875 billion distributed according to Sec. 1712 • Deficit Reduction: Remaining allowances not distributed in a calendar year shall be allocated to the Deficit Reduction Fund
Sec. 2101 (CAA 786)	<p>Exchange for State Allowances</p> <ul style="list-style-type: none"> • Establishes a mechanism for state allowances issued by CA, RGGI, or WCI to be exchanged for federal allowances, which are deducted before other allocations • Sufficient allowances will be provided to compensate the holder of the state allowance, based on the average allowance auction price in the year the allowance was issued
Sec. 2101 (CAA 787)	<p>Deficit Reduction Fund: establishes fund within Treasury for receipt of allowance proceeds</p>
Sec. 2101 (CAA 788)	<p>Early Action Recognition</p> <ul style="list-style-type: none"> • 2/3 of allowances allocated for early action (1% for three years) will go to states that have implemented a carbon cap and trade program (distribution based on the number of allowances issued); value of allowances is to be used to support programs that decrease GHG emissions, with priority for cost-effective programs such as energy efficiency • Remaining 1/3 of allowances used for exchange of qualified offsets from voluntary offset systems issued before 1/1/2009 for offsets achieved from 2001-2008; exchange based on average monetary value of offset from 2006-2008
Sec. 2101 (CAA 790 - 793)	<p>Auction Procedures:</p> <ul style="list-style-type: none"> • Quarterly auctions shall be conducted by EPA in a uniform price format; • Open to compliance entities and eligible market participants defined pursuant to Commodity Exchange Act (see subtitle E for additional detail); • Reserve auction price (minimum price) set at \$12 per allowance in 2013, increasing annually at 3% plus rate of inflation • Each quarter EPA shall set-aside from pool of allowances to be auctioned a quantity of allowances for sale to transportation fuel providers, based on Energy Information Administration (EIA) estimate of transport fuel emissions from prior quarter • EPA may auction allowances on consignment for third parties (CAA 791) • GAO to review auction format in 2015 and every 2 years thereafter (CAA 792)
Sec. 2101 (CAA 797)	<p>Presidential Determination: if the President determines that a multilateral agreement with other major GHG-emitting countries responsible in total for more than 67% of global GHG emissions (including U.S.) has been achieved, EPA may set aside up to 5% of allowances to fund reduced international deforestation, adaptation, and clean technology transfers to other nations, allowances drawn from deficit reduction allocation</p>
Sec. 2101 (CAA 798)	<p>Merchant Generator Efficiency Incentive: EPA shall establish program to reward merchant coal generators for improving the efficiency of, or retiring coal plants; incentive</p>

	shall be based on 1/2 of the qualifying emissions from such plants, and shall be limited to 35GW of capacity; portion may be set aside to compensate for indirect economic impacts; no allocation provided; [incomplete Section]
Subtitle C	Achieving Fast Mitigation
Sec. 2201 (CAA 619)	<p>Hydrofluorocarbons: establish regulations to phase down the production and use of high global warming potency hydrofluorocarbons (HFCs)</p> <ul style="list-style-type: none"> • A closed cap and trade program is established for producers and importers with allowances increasingly auctioned over time • Use of HFCs to decline relative to baseline by 67% by 2020, 25% by 2030, and 15% after 2032 • An offset program is established for the destruction of HFCs • Limited exceptions for essential uses (fire suppressant, etc.) • Proceeds of HFC cap and trade system used to reduce emissions of HFCs
Sec. 2211 – Sec. 2213	<p>Black Carbon:</p> <ul style="list-style-type: none"> • EPA shall develop a report on the climate impacts of black carbon, sources in the U.S., opportunities for control, co-benefits of control, and other issues • EPA shall use the existing authority of the Clean Air Act to address the climate and health effects of black carbon (CAA 805) • Amends Energy Policy Act of 2005 to require EPA to create a program to retrofit heavy-duty diesel vehicles to reduce black carbon emissions; placeholder language for appropriations
Sec. 2214	Enhanced Soil Sequestration: USDA shall provide grants to research, develop, demonstrate, and deploy biochar production technology for increasing terrestrial carbon sequestration with waste biomass
Sec. 2221-	Sense of the Senate on International Methane: U.S. should support reducing emissions of methane and increase use of methane as energy source
Sec. 2231	Interagency Study on Fast Mitigation: EPA and DOE shall assess capacity and costs of policies and programs to reduce emissions of potent non-carbon GHGs
Subtitle D	Ensuring Regulatory Predictability for Greenhouse Gases
Sec. 2301 – Sec. 2304	Amends CAA to prohibit regulation of GHGs by means of existing mechanisms: <ul style="list-style-type: none"> • Prohibits regulation of GHGs as criteria pollutants (Sec. 2301) and hazardous air pollutants (Sec. 2303) • Prohibits establishment of GHG performance standards for capped sources (Sec. 2302) • Prohibits regulation of GHGs based on international impacts (Sec. 2304)
Sec. 2305	<p>Retention of State Authority</p> <ul style="list-style-type: none"> • In Sec. 112 of the Clean Air Act, Adds a reference to the preemption of state cap and trade programs in Sec. 806(c) – see below • Defines that the terms: ‘<i>standard or limitation respecting emissions of air pollutants</i>’ and ‘<i>requirement respecting control or abatement of air pollution</i>’ include any provision to limit greenhouse gas emissions, require surrender to the State or a political subdivision of a State of emission allowances or offset credits established or issued under this Act, or require the use of such allowances or credits as a means of demonstrating compliance with requirements established by a State or political subdivision of a State. • This Section means states can continue to adopt climate related policies as long as they are not those preempted in 806(c), which can include retirement of allowances or offsets created by this act, and as long as the policies are more stringent than this act

Sec. 2306	<i>New Source Review:</i> amends CAA to eliminate new source review based on GHG emissions for facilities permitted after 1/1/2009
Sec. 2307	<i>Permit Programs:</i> amends CAA to eliminate GHG requirements for permitted sources
Subtitle E	Regulation of Greenhouse Gas Markets
Sec. 2401 – Sec. 2416	Amends the Commodity Exchange Act to provide broad authority to the Commodity Futures Trading Commission (CFTC) to regulate trading of GHG instruments in order to prohibit fraud and excessive volatility: <ul style="list-style-type: none"> • Restricts market participation to compliance entities and participants registered with CFTC (Sec. 2408) • CFTC to establish position limits to prohibit excessive speculation (Sec. 2404) • CFTC to establish rules for GHG instrument trading organizations, including market monitoring and reporting requirements (Sec. 2410)
Subtitle F	Miscellaneous
Sec. 2501 (CAA 806)	<i>State Programs</i> <ul style="list-style-type: none"> • Allows for grants to state environmental agencies to support climate change programs related to this act • Allows for consolidated state planning and reporting related to requirements under this act and the use of allowances allocated to the state to conduct related activities • 806(c): <ul style="list-style-type: none"> ○ Permanently preempts state GHG cap and trade programs beginning with the year allowances are first allocated under this act ○ Explicitly does not preempt: general GHG limits or non cap and trade GHG programs, vehicle emissions requirements, or fuel emissions requirements (i.e. low carbon fuel standard)
Sec. 2501 (CAA 807)	<i>Forestry Sector Greenhouse Gas Accounting</i> <ul style="list-style-type: none"> • EPA, USDA and DOI shall provide an annual report on sequestration and emissions occurring on forest land and in forest products sector • If EPA determines existing data collection programs are not sufficient for this purpose, it will report to Congress on new information and additional authorities that would be necessary to carry out this accounting
Sec. 2501 (CAA 808)	<i>Studies on Impacts of Renewable Biomass Use</i> <ul style="list-style-type: none"> • EPA, in consultation with USDA and DOI, will conduct a study every 5 years on the impacts of renewable biomass use, including 1) total GHG emissions; 2) net GHG emissions, including direct and indirect emissions; 3) impacts on air and water quality; and 4) impacts on soil productivity, biodiversity and habitat • USDA, in consultation with EPA and DOI will conduct a study every 5 years on the impacts of renewable biomass use on food production • Based on these studies, EPA will recommend to Congress whether compliance obligations should be changed to require allowances for burning renewable biomass, or gas and liquid fuels derived from renewable biomass
Sec. 2501 (CAA 809)	<i>Review of Definition of Renewable Biomass</i> <ul style="list-style-type: none"> • The National Academy of Sciences shall conduct a study on how renewable biomass contributes to the goals of increasing the energy independence, protecting the environment, and reducing greenhouse gas pollution • Based on this report, EPA and USDA shall make recommendations to Congress on whether the definition of renewable biomass from private lands should be modified

	<ul style="list-style-type: none"> • DOI, EPA, and USDA shall conduct a scientific review regarding renewable biomass from federal lands and make recommendations to Congress on whether this definition should be modified
TITLE III	CONSUMER PROTECTION
Subtitle A	Investing in Low-carbon Electricity and Energy Efficiency for Consumer Protection
Sec. 3001	<p><i>Electricity Consumers:</i></p> <ul style="list-style-type: none"> • Up to 10% of allocation to merchant coal generators and up to 4.3% of allocation to long term contract generators; • Remaining allowances distributed among LDCs based 75% on emissions and 25% on sales; • Allowance value to be used for consumer benefit, with oversight by public utility regulators; benefits to be distributed among ratepayer classes on a pro-rata basis, based on electricity deliveries to each class, and equitably among individual ratepayers within each ratepayer class; • EPA, in consultation with State utility regulators, to develop guidelines for use of allowance value for consumer benefit; income or profits to shareholders of a electric LDC shall not constitute ratepayer benefits; • Utilities to develop through regulatory proceedings and make public plans for use of allowance value; • EPA and Government Accountability Office (GAO) audits of allowance usage for consumer benefit; EPA report within 1 year of enactment on projected effect of allowance distribution system on retail electric rates.
Subtitle B	Investing in Low-carbon Heating and Energy Efficiency for Consumer Protection
Sec. 3101	<p><i>Natural Gas Consumers:</i></p> <ul style="list-style-type: none"> • Allowances distributed among LDCs based on gas deliveries; • Allowance value to be used for consumer benefit, with oversight by public utility regulators; benefits to be distributed among ratepayer classes on a pro-rata basis, based on electricity deliveries to each class, and equitably among individual ratepayers within each ratepayer class; • At least 20% of allowances must be used to support cost-effective energy efficiency programs for natural gas consumers; overseen by state PUCs; • EPA, in consultation with State utility regulators, to develop guidelines for use of allowance value for consumer benefit; income or profits to shareholders of a natural gas LDC shall not constitute ratepayer benefits; • Utilities to develop through regulatory proceedings and make public plans for use of allowance value; • EPA and GAO audits of allowance usage for consumer benefit; EPA report within 1 year of enactment on projected effect of allowance distribution system on retail electric rates.
Sec. 3102	<p><i>Home Heating Oil and Propane Consumers:</i></p> <ul style="list-style-type: none"> • Allocation distributed among states based on share of national emissions from heating oil and propane • Allowance value to support state-supervised efficiency programs and rebates for consumers; • At least 50% must support cost-effective efficiency programs, with priority given to existing programs and to comprehensive, fuel-blind, coordinated programs; • States to report to EPA annually on use of allowance value including demonstration of cost-effectiveness and energy savings achieved by efficiency program investments;

	<ul style="list-style-type: none"> EPA may withhold allowance value from states not acting in accordance with consumer benefit requirements and distribute such allowance value to other states.
Subtitle C	Consumer Relief
Sec. 3201 - Sec. 3202	Refundable Credit for Working Families Relief: from 2013-2029, 2.5% of allowances are auctioned to support tax rebates to families between 150% and 250% of the poverty line, with larger rebates to individuals with lower incomes
Sec. 3203 - Sec. 3205	Energy Refund Program: amends the Social Security Act to provide monthly refunds to households below 150% of the poverty line to compensate for lost purchasing power resulting from APA
Sec. 3206	Establishment of Universal Trust Fund: establishes within Treasury an account to receive proceeds of allowances allocated under Sec. 781(a)(5); 25% of proceeds used for deficit reduction; 75% of proceeds used for universal refund program (Sec. 3207)
Sec. 3207	Universal Refund: amends Internal Revenue Code of 1987 to provide refunds to all taxpayers, adjusted by household size, beginning in 2026
Subtitle D	Advocating for Consumers
Sec. 3301	Office of Consumer Advocacy: creates an office to advocate for consumers before FERC and other federal agencies, and to collect data on and investigate utility rates; placeholder language for appropriations
Title IV	JOB PROTECTION AND GROWTH
Subtitle A	Protecting American Manufacturing Jobs and Preventing Carbon Leakage
Sec. 4001 (CAA 771-774)	<p>Ensuring Real Reductions in Industrial Emissions:</p> <ul style="list-style-type: none"> Purposes: to avoid significant additional emissions from sources in other countries due to out-migration of energy- and emissions-intensive industries (metal, glass, chemical, cement, pulp & paper, etc.) in response to cap and trade induced production cost increases; to provide limited compensation through rebates to eligible industrial sources who are subject to significant international competition; Distribution of Rebates: rebates will be distributed only to industries that are especially energy and carbon intensive and have a high level of trade intensity; distribution among entities is based primarily on energy and emissions intensity of their facilities; Phase Out: for each industrial Sector allocations begin to phase out when 70% of global production in that Sector operates under emissions constraints; allocation declines to zero from 2026-2030 Funded through declining allowance allocations, per Sec. 2101
Sec. 4001 (CAA 775-776)	<p>Promoting International Reductions in Industrial Emissions: it should be policy of the U.S. to negotiate under the UNFCCC framework to have all countries equitably reduce GHG emissions</p> <ul style="list-style-type: none"> By 2019 the President should assess the impact of U.S. regulations on international competitiveness of U.S. industries and could require importers of primary goods to hold allowances equivalent to the emissions associated with production through a reserve allowance program
Sec. 4001 (CAA 777-778)	<p>International Reserve Allowance Program:</p> <ul style="list-style-type: none"> If the President determines that significant carbon leakage is occurring within an industrial Sector, EPA and U.S. Customs shall create a program to require that importers hold reserve allowances proportional to the carbon content of imported goods

	<ul style="list-style-type: none"> • Does not apply to goods from least developed countries or countries responsible for less than 5% of output in the Sector • President may elect not to establish program if deemed not in U.S. economic or environmental interest; if program not established, affected Sector shall have rebate increased • Shall not take effect while rebates to trade-exposed industries fully offset compliance costs
Sec. 4002 (CAA 796)	Domestic Fuel Production: EPA shall distribute refiner allocation among refiners based on energy and emissions intensity
Sec. 4003	Advanced Energy Project Credit: amends Internal Revenue Code of 1986 to increase advanced energy project credit from \$2.3 billion to \$7.3 billion
Sec. 4004	Report on the Utilization of Tax Incentives: by 1/1/2013, GAO shall report on the use and effectiveness of tax incentives
Subtitle B	Clean Energy Technology and Jobs
Part I	Clean Energy Career Development
Sec. 4101	Clean Energy Curriculum Development Grants: the Dept. of Education is to provide grants on a competitive basis to fund programs of study in energy efficiency, renewables, and climate change mitigation
Sec. 4102 - Sec. 4103	Development of Information and Resources Clearinghouse for Vocational Education and Job Training in Renewable Energy Sectors: Sec. of Labor, in consultation with Sec. of Education shall develop internet-based resources to aid job training in renewable energy field; Sec. of Labor, in consultation with DOE, shall establish a green career demonstration project and apprenticeships; Sec. of Labor to monitor quantity of affected and displaced workers to ensure sufficient funding
Part II	Transportation
Sec. 4111	Investing in Clean Vehicles: EPA, at direction of DOE, shall distribute allowances allocated pursuant to CAA 781(c)(2) to automobile manufacturers for reequipping, expanding, or establishing manufacturing facilities in the U.S. for energy efficient vehicles or components, with not less than 25% of funding to electric vehicle manufacture
Sec. 4121 - Sec. 4124	Powering Vehicles with Natural Gas: <ul style="list-style-type: none"> • Amends Internal Revenue Code of 1986 to extend and increase tax credits for purchases of natural gas-powered vehicles • Allows local and state government to issue up to \$3 billion in bonds to finance natural gas vehicle projects • Provides tax incentives for natural gas vehicle manufacturing facilities placed in service before 2020 • GSA, DOE, and EPA shall assess the viability and benefits of increasing natural gas vehicles in the federal fleet
Sec. 4131	Notice of Hydraulic Fracturing Operations: amends Emergency Planning and Community Right to Know Act of 1986 to require that producers of natural gas through hydraulic fracturing disclose all chemical constituents of operations
Sec. 4141	Emissions Standards for Mobile Sources: EPA shall establish new emissions standards for heavy-duty vehicles by the end of 2010 and for non-road vehicles and engines by the end of 2012, allowing for averaging, banking and trading of emissions credits; EPA and NHTSA, in consultation with California, shall establish vehicle emission standards for model year 2016

	and thereafter to ensure continuing progress toward improving efficiency and reducing emissions
Part III	Agriculture
Sec. 4151 - Sec. 4153	<p><i>Carbon Conservation Program</i></p> <ul style="list-style-type: none"> • USDA shall establish and jointly administer the program with DOI to: reward the continuation of carbon conservation practices by early adopters; develop new offset methodologies; improve management practices; avoid conversion of private agricultural, forest and grassland, and; improve sequestration on federal land • Activities receiving funding under this program cannot receive offset credits • Program carried out through the use of conservation easements, timber harvest or grazing contracts, and sequestration contracts • Carbon sequestration contracts have a duration of 10 years; nonforestry contract holders may withdraw after 5 years with no penalty • Contracts prioritize early adopters and high carbon conservation per acre; compensation linked to amount and duration of emissions reductions • 30% of funding designated for conservation easements, with priority for 1) forest land, or 2) prairie and grassland within the boundary of a working farm or ranch • USDA shall develop requirements to address reversals • Forest Service and Bureau of Land Management shall offer financial incentives through timber harvest contracts and grazing contracts. • USDA and DOI shall provide annual reports to EPA on: total tons sequestered or emissions avoided through the various contract mechanisms; reversals, and; total number of acres by method and by state • USDA and DOI shall coordinate program activities with existing agency conservation programs, such as the conservation reserve program, state and private forestry programs, Land and Water Conservation Fund, and others • USDA and DOI shall conduct 5 year reviews addressing total emissions reductions and sequestration by activity type, effect on average farm income, potential for future reductions and recommended changes to the program • Establishes in the Treasury a separate account to carry out the program
Part IV	Manufacturing and Technology
Sec. 4161 – Sec. 4162	<i>Low-Carbon Industrial Technologies Research and Development:</i> establishes a research institute to develop technologies to help U.S. industries increase efficiency and reduce GHG emissions
Title V	INTERNATIONAL CLIMATE CHANGE ACTIVITIES
Sec. 5001 - Sec. 5007	<ul style="list-style-type: none"> • Establishes that it is in the U.S. interest to reduce international deforestation, promote the international deployment of clean technologies, aid developing countries in climate change mitigation and adaptation, and support an agreement on global climate change through the United Nations Framework Convention on Climate Change (UNFCCC) • Establishes a Strategic Interagency Board on International Climate Investment including the Sec. of State, USAID, EPA, DOE, USDA, Treasury, Commerce to assess and monitor agency actions supporting financing of international climate change activities • Emissions Reductions from Reduced Deforestation (Sec. 5004): <ul style="list-style-type: none"> ○ A program shall be established by EPA to achieve additional emissions reductions (beyond the cap) through support for reduced international deforestation; ○ Projects must deliver emission reductions in excess to baseline, which assumes

	<ul style="list-style-type: none"> o cessation of deforestation over 20 year period o Projects may be implemented by a range of entities and mechanisms, with clear standards, accounting, reporting, and review; o Funding provided through Cost Containment Reserve (see CAA 726); placeholder language for additional appropriations • Sec. of State, in consultation with USAID, Treasury, and EPA shall establish a program to deliver aid to most vulnerable developing countries for climate change adaptation (Sec. 5005); funded with ½ of allowances allocated to adaptation under CAA 781(d)(1)(B) • Sec. of State shall prepare biannual reports on climate and energy policy of five highest GHG-emitting countries that are not members of OECD
Title VI	COMMUNITY PROTECTION FROM CLIMATE CHANGE IMPACTS
Sec. 6001 - Sec. 6011	<ul style="list-style-type: none"> • Establishes a Natural Resources Climate Change Adaptation Panel led by the National Oceanic and Atmospheric Administration (NOAA), including other relevant agencies to develop a strategy for making natural resources more resilient to climate change impacts • Strategy shall establish research needs and set forth roles for Federal agencies in implementing plan; plan reported to Congress within 1 year of enactment of Act • Each agency is required to develop a climate change adaptation plan every 5 years • In order to receive funds allocated to adaptation under CAA 781(d)(1)(A), states must develop climate change adaptation plans • DOI shall create a program to help states establish fish and wildlife habitat corridors
Title VII	BUDGETARY EFFECTS
Sec. 7001	<i>Budgetary Effects:</i> ensures budget neutrality of APA programs

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