INVESTING IN CLIMATE ACTION AND PROTECTION ACT
SUBTITLE-BY-SUBTITLE SUMMARY

TITLE I – CAPPING GREENHOUSE GAS EMISSIONS

SECTION 101. AMENDMENT TO THE CLEAN AIR ACT

Section 101 of the bill adds a new Title VII to the Clean Air Act, the subtitles of which are summarized below.

Subtitle A: Tracking Emissions

Subtitle A establishes a process through which EPA may designate substances as greenhouse gases for the purposes of this Act. It also directs EPA to determine (and periodically review) the quantity of each greenhouse gas that makes the same contribution to global warming as one metric ton of CO_2.

Subtitle A directs EPA to establish a national greenhouse gas registry to collect information on greenhouse gas emissions, on a regular basis, and make that information publicly available.

Subtitle B: Reducing Emissions

Subtitle B directs EPA to establish an emission allowance account, composed of a separate quantity of emission allowances for each calendar year from 2012 through 2050. In a table, the subtitle identifies the number of emission allowances that will be issued for each year. EPA will create, at the inception of the program, all of the emission allowances that will exist over the life of the program. Each emission allowance will have a unique serial number that will include the calendar year for which it was created.

The bill covers emissions of seven greenhouse gases – carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulfur hexafluoride (SF_6), and nitrogen trifluoride (NF_3) – plus any other anthropogenic gas that EPA designates as a greenhouse gas, based on a determination that such gas has a global warming potential equal to or greater than that of CO_2. Each emission allowance is equal to one metric ton CO_2-equivalent – the quantity of a greenhouse gas that makes the same contribution to global warming as one metric ton of CO_2.

The emissions "cap" will cover 87 percent of total U.S. greenhouse gas emissions. The size of the 2012 Emission Allowance Account is 6,098 allowances, which is equivalent to greenhouse gas emissions from sources covered by the cap in 2005. The size of the cap will decline each year, resulting in a reduction of U.S. emissions to 20 percent below 2005 levels in 2020 and 85 percent below 2005 levels in 2050.

The bill requires the owner or operator of each "covered entity," at the end of each calendar year beginning in 2012 and ending in 2050, to submit to EPA one emission allowance for each metric ton CO_2-equivalent of greenhouse gases that they emitted or that was contained in the fuels or chemicals they put into commerce that year. Covered entities include:

- Electric power and industrial facilities;
- Entities that produce or import petroleum- or coal-based liquid or gaseous fuels – including most fossil-based transportation fuels;
- Entities that produce or import HFCs, PFCs, SF_6, or NF_3;
- Natural gas local distribution companies – to cover emissions from natural gas combustion by residential and commercial facilities; and
- Geological carbon sequestration sites – to cover any leakage.

Entities that do not meet a 10,000 CO_2-equivalent threshold will not be required to submit allowances. To avoid double-counting of emissions, (1) electric power and industrial facilities will not be required to submit allowances for any emissions resulting from the use of petroleum- or coal-based liquid or gaseous fuels; (2) natural gas local distribution companies will not be required to submit allowances for emissions resulting from combustion of any natural gas delivered to an electric power or industrial facility that meets the 10,000 metric ton CO_2-equivalent threshold; and (3) electric power and industrial facilities will not be required to submit allowances for emissions of HFCs, PFCs, SF_6, or NF_3.

HFC producers will not be required to submit allowances between 2012 and 2019 in order to ensure U.S. success in meeting Montreal Protocol targets for stratospheric ozone-depleting substances and to allow adequate time for environmentally preferable substitutes for HFCs to come to market.

A covered entity may submit domestic offset credits approved by EPA under subtitle E in lieu of emission allowances to satisfy up to 15 percent of its compliance requirement. A covered entity may also submit international emission allowances or offset credits approved by EPA under subtitle F to satisfy up to 15 percent of its compliance requirement.

EPA will issue destruction credits to entities that convert a greenhouse gas (other than methane) to another gas with a lower global warming potential. The number of credits issued will be equal to the number of metric tons of CO_2-equivalent of reduction in global warming potential achieved through such conversion. A covered entity may use these credits to satisfy up to 100 percent of its annual compliance requirements.

Subtitle C: Distribution of Allowances

Subtitle C directs EPA to auction virtually all of the emission allowances each year, beginning with 94 percent auction from 2012-2019 and transitioning to 100 percent auction in 2020.

The remaining allowances will be provided to U.S. manufacturers of trade-exposed primary goods (such as iron and steel, cement, aluminum, bulk glass, and paper) as a transitional measure to avoid production shifting abroad and thus undermining the environmental objectives of this bill. Six percent of total allowances in 2012 through 2020 (with an estimated cumulative value of

$96 billion) will be allocated to manufacturers based upon the predicted adverse impact of direct and indirect costs of this Act.
To optimize market liquidity and stability, auctions will be held on a quarterly basis. Allowances for the current compliance year and for future compliance years (up to four years in the future) will be available at each auction.

Auction proceeds will be used for a variety of public benefit purposes. Up to 0.5 percent of auction proceeds will be deposited in to the Climate Protection Management Fund to cover the costs associated with EPA and FERC administration of the Act. Fifty million dollars per year will be dedicated to climate change education programs and centers for excellence established under Subtitle H of Title III. All remaining proceeds will be divided among 10 separate funds which will fund the programs described in Title III and Title IV of this Act.

Subtitle D: Trading, Banking, and Borrowing

Subtitle D establishes rules for the trading, banking, and borrowing of emission allowances. Anyone may buy, sell, or transfer emission allowances, or submit them to EPA for retirement. Unlimited "banking" of allowances for future use is permitted. A covered entity may also borrow allowances from EPA (to be drawn from the emissions budget for future years) to meet up to 15 percent of its annual compliance obligation, but an allowance "loan" must be repaid within 5 years with 10 percent annual interest.

Subtitle E: Offsets

Subtitle E establishes a program to issue offset credits to entities that carry out projects in the United States that achieve real, verifiable, additional, permanent, and enforceable reductions in emissions or increases in storage of carbon in plants and soils.

Four types of projects will be eligible to receive offset credits:

- Reductions in (outside-the-cap) greenhouse gas emissions from oil and gas systems;
- Reductions in greenhouse gas emissions from livestock operations that are not covered by performance standards under subtitle H;
- Reductions in greenhouse gas emissions from abandoned coal mines; and
- Increases in biological carbon sequestration through afforestation and reforestation.

Activities covered by compliance obligations in subtitle B or performance standards in subtitle H, or receiving support under subtitle D of Title III are not eligible to earn offset credits.

Subtitle E directs EPA to establish standardized monitoring, quantification, and accounting protocols and standards for approval of offset credits. Offset credits may be claimed for eligible projects annually by submitting verification reports certified by an accredited third party to EPA.

Subtitle F: International Emission Allowances and Offset Credits

Subtitle F directs EPA to establish regulations providing for approval of emission allowances from foreign greenhouse markets that impose mandatory absolute limits on emissions that are of

comparable stringency to the program established by this bill, including comparable monitoring, compliance, and enforcement practices.
Subtitle F also directs EPA to establish regulations providing for approval of categories and subcategories of international offset credits that meet certain criteria. Only credits generated from projects in countries that have taken action on climate change comparable to that of the United States, or in countries that have very low emissions or are among the least developed of developing countries, are eligible for use under this title.

Subtitle G: Global Effort to Reduce Greenhouse Gas Emissions

Subtitle G encourages the President to work proactively under the United Nations Framework Convention on Climate Change and in other appropriate forums, to establish binding agreements committing all major greenhouse gas-emitting nations to contribute equitably to the reduction of global greenhouse gas emissions.

Subtitle G also directs the President to determine whether each foreign country has taken action to reduce greenhouse gas emissions that is "comparable" to that of the United States, taking into account the level of economic development of each country. If, by 2020, any of our trading partners have not taken "comparable" action, the President is authorized to require importers of trade-exposed primary goods (e.g., iron and steel, cement, aluminum, bulk glass, and paper) from those countries to purchase special "international reserve allowances" to account for the greenhouse gas emissions from the production of the goods. Least-developed countries and countries with very low greenhouse gas emissions will be exempt from this requirement.

The pool of international reserve allowances will be separate from the domestic emission allowance pool, so that the program will not affect domestic emission levels or the price of domestic emission allowances. Proceeds from the sale of international reserve allowances will provide supplemental funding for the International Clean Technology Fund described in subtitle B of Title IV.

Subtitle H: Standards for Coal-Fired Power Plants and Non-Covered Facilities

Subtitle H directs EPA to promulgate performance standards for certain sources not included under the cap – such as coal mines, landfills, wastewater treatment operations, and large animal feeding operations – that emit at least 10,000 metric tons CO_2-equivalent per year. These standards will require such sources to apply best available control technologies or practices.

Subtitle H also establishes mandatory performance standards for any new coal-fired power plant, requiring all plants on which construction begins after January 1, 2009, to achieve capture and geological sequestration of 85 percent of their CO_2 emissions within a defined time frame.

SECTION 102: CONFORMING AMENDMENTS

Section 102 of the Act amends sections 113, 114, and 307 of the Clean Air Act to make the Act's existing mechanisms for enforcement, inspections, administrative process, and judicial review applicable to the new Title VII of the Act.

SECTION 103: COMPLEMENTARY POLICIES FOR HYDROFLUOROCARBONS

To ensure proper use and disposal of HFCs and other fluorinated gases used as substitutes for ozone-depleting substances, this section amends sections 608 and 609 of the Clean Air Act to extend to these substances the requirements of the Clean Air Act that already apply to the sale, use, and disposal of chlorofluorocarbons (CFCs) and hydrochlorofluorocarbons (HCFCs).

SECTION 104: WAIVER OF PREEMPTION FOR CALIFORNIA STANDARDS FOR VEHICLE GREENHOUSE GAS EMISSIONS

This section overrides EPA's unfounded denial, in December 2007, of California's petition for a waiver of preemption under the Clean Air Act of its greenhouse gas emissions standards for vehicles. This will permit California and the other States that have adopted the California standards to proceed with implementation of these standards.

SECTION 105: LOW-CARBON FUEL STANDARD

This section amends section 211 of the Clean Air Act to establish a Low-Carbon Fuel Standard (LCFS). The LCFS establishes a market-based system to incentivize reductions in the lifecycle greenhouse gas emissions associated with the production and use of transportation fuels, through deployment of advanced biofuels, plug-in hybrid vehicles, and hydrogen. The LCFS is integrated with the current Renewable Fuel Standard, promoting a long-term market for substitutes to petroleum.

TITLE II – CARBON MARKET OVERSIGHT

Title II creates a new Office of Carbon Market Oversight ("OCMO") within FERC, which is charged with ensuring transparency, fairness, and stability in the market for emission allowances, offset credits, and derivatives thereof (referred to as "regulated instruments").

The OCMO will establish rules requiring registration of (1) self-regulated "registered carbon trading facilities" on which regulated instruments are traded, (2) "carbon clearing organizations" that provide clearing services to trading facilities, and (3) brokers and dealers trading in regulated instruments. Registered carbon trading facilities will publicize price and other trading data and enforce rules against fraud and market manipulation.

Trading of regulated instruments generally will be limited to registered exchanges, except that, in order to provide greater flexibility and efficiency in hedging carbon risks, large institutions and high net-worth individuals are permitted to trade regulated derivatives off-exchange (in the over-the-counter market). To ensure market transparency, the OCMO will establish regulations providing for reporting of trading activity by large traders in regulated instruments. To prevent market participants from seeking to "corner" or otherwise manipulate the market, the OCMO may adopt position limits or position accountability requirements for regulated instruments.

Title II establishes rules against fraud and market manipulation, which OCMO is authorized to enforce through administrative procedures and penalties, civil enforcement actions in federal district court, or (in the case of knowing or willful violations) criminal prosecution. Finally, the OCMO will monitor the functioning of the carbon market and its effects on the U.S. economy and will provide quarterly reports to Congress.

TITLE III – INVESTING IN AMERICA'S LOW-CARBON FUTURE

Title III establishes a series of domestic programs funded by auction proceeds. A description of each program, along with an estimate of cumulative funding for the program over the life of the bill, is provided below.

Subtitle A: Climate Trust Tax Credits and Rebates

Under Subtitle A, an estimated $4.3 trillion (55 to 58.5 percent of auction proceeds) will be used for refundable tax credits and rebates for middle- and low-income households, to compensate for any increase in energy costs resulting from the bill. Tax credits will be used to reach middle-income wage earners and senior citizens, and cash rebates – distributed through the Electronic Benefits Transfer systems used for food stamps – will be used to reach low-income households. All households earning under $110,000 will be eligible. Virtually all costs from climate regulation will be covered for households earning under $70,000, with benefit levels phasing out gradually for households earning $70,000 to $110,000.

Subtitle B: Low-Carbon Technology Fund

Under Subtitle B, an estimated $963 billion (12.5 percent of auction proceeds) will be used to fund low-carbon energy technology research, development, demonstration, and deployment programs administered by the Department of Energy (DOE). These include RD&D programs authorized under existing law in the areas of renewable electricity generation, carbon capture and sequestration, electric transmission and distribution efficiency (including smart grid technologies), low-carbon renewable fuels, low-emission vehicles, building efficiency, industrial efficiency, energy storage technologies, and the Advanced Research Projects Agency-Energy ("ARPA-E"). In addition, Subtitle B establishes two new programs to promote the deployment of renewable electricity generation – the first awards production payments through a reverse auction and the second provides rebates for the purchase and installation of distributed generation technologies such as solar panels. From 2010-2020, cost-sharing grants are authorized to cover the incremental costs of implementing carbon capture and sequestration technology at coal-fired power plants.

Subtitle C: National Energy Efficiency Fund

Under Subtitle C, an estimated $963 billion (12.5 percent of auction proceeds) will be used to fund a broad array of efficiency programs. These include: (1) a program to award incentive payments to States based on the magnitude of energy savings each State achieves each year through consumer efficiency programs; (2) programs to award grants to states that adopt and implement building efficiency and recycling policies; (3) funding for the Weatherization Assistance Program for low-income persons and the Low Income Home Energy Assistance Program; and (4) grants to support state and local mass transit and “smart growth” projects that will reduce vehicle miles traveled.

Subtitle D: Agriculture and Forestry Carbon Fund

Under Subtitle D, an estimated $378 billion (4.5 to 5 percent of auction proceeds) will be used to fund a program, administered by the Department of Agriculture, to support projects by U.S. farmers and foresters that increase biological sequestration of carbon and reduce greenhouse gas emissions through improved agricultural soil management and forest management practices (not including afforestation and reforestation). USDA is also directed to undertake a complementary program of research, education, and outreach on agriculture and forestry greenhouse gas management.

Subtitle E: Green Jobs Training and Worker Transition Assistance

Under Subtitle E, an estimated $147 billion (1.5 to 2 percent of auction proceeds) will be used to fund the green jobs training programs established under the Energy Independence and Security Act of 2007, and a program, administered by the Department of Labor, which will provide training, income support, and tax credits for health care insurance for up to two years to any workers affected by the transition to a new low-carbon economy.

Subtitle F: National Climate Change Adaptation Program

Under Subtitle F, an estimated $185 billion (2 to 2.5 percent of auction proceeds) will be used to support a comprehensive program to increase America’s resilience to the impacts of climate change. Under this program, the National Oceanic and Atmospheric Administration will (1) develop periodic regional and national assessments of America’s vulnerability to climate change impacts; and (2) establish a National Climate Service to provide research products and decision tools, based upon robust monitoring and observational capabilities, to federal, state, local, and tribal decision makers to assist with developing adaptation strategies.

Subtitle F also requires federal agencies to develop and implement plans to address climate change impacts within their respective jurisdictions and directs the President, pursuant to a detailed plan submitted for congressional review, to fund state, local, and tribal government programs and projects to reduce vulnerability to climate change impacts.

Subtitle G: Natural Resource Conservation Fund

Under Subtitle G, an estimated $147 billion (1.5 to 2 percent of auction proceeds) will be used to support measures, implemented by federal land and natural resource management agencies and the States, to protect U.S. natural resources, wildlife, and fisheries against adverse impacts from climate change. Federally administered funds must be used in accord with a national strategy developed by the President, with advice from a science advisory committee, and state-administered funds must be used in accord with federally approved state strategies.

Subtitle H: Climate Change Education and Centers for Excellence

Under Subtitle H, $2 billion (up to $50 million per year) will be used to provide support, through the National Science Foundation and EPA, for the development and implementation of climate change education programs and to provide cost-sharing grants supporting the establishment, at colleges, universities, and non-profit organizations, of national centers for excellence on climate change science, technology, and policy.

TITLE IV – ENCOURAGING GLOBAL ACTION

Title IV establishes three international programs, funded by auction proceeds, to encourage global action to combat climate change.

Subtitle A: International Forest Protection Fund

Under Subtitle A, an estimated $147 billion (1.5 to 2 percent of auction proceeds) will be used to support policies in qualifying developing countries that reduce emissions from deforestation and forest degradation or increase biological carbon sequestration through restoration of forests and degraded lands, afforestation, and improved forest management. Countries that do not initially qualify for inclusion in the incentive program are eligible for grants to build their capacity to reduce emissions from deforestation and degradation and increase carbon storage in forests.

Subtitle B: International Clean Technology Fund

Under Subtitle B, an estimated $301 billion (3.5 to 4 percent of auction proceeds) will be used to support an international clean technology fund. This fund will provide support for the adoption of clean energy and efficiency technologies by major-emitting developing countries that the President certifies, under Title I, as having taken "comparable action" to combat climate change, taking into account the country's level of economic development.

Subtitle C: International Climate Change Adaptation Fund

Under Subtitle C, an estimated $185 billion (2 to 2.5 percent of auction proceeds) will be used to support an international adaptation program, to be administered by the U.S. Agency for International Development, which will fund projects to assist the most vulnerable developing countries in adapting to the impacts of climate change.

TITLE V – LEGAL FRAMEWORK FOR GEOLOGICAL SEQUESTRATION OF CARBON DIOXIDE

Title V amends the Safe Drinking Water Act to require EPA to develop comprehensive regulatory standards for underground injection of carbon dioxide, and directs EPA to establish a task force charged with providing Congress with recommendations regarding the legal framework to govern liability with respect to closed geological storage sites.

TITLE VI – BUILDING EFFICIENCY STANDARDS

Title VI incorporates provisions from the House-passed version of the energy bill from 2007, requiring the Department of Energy to develop model building efficiency codes that States are required to adopt and enforce. States that do so become eligible for funding from the National Energy Efficiency Fund (described in subtitle C of Title III).

TITLE VII – REVIEWS AND RECOMMENDATIONS

Title VII establishes a comprehensive framework for periodic review and reports to Congress, by the National Academy of Sciences (NAS), the Government Accountability Office (GAO), and relevant federal agencies, of all major aspects of the bill.

The NAS is directed to report every five years on the latest scientific information relevant to greenhouse gas emissions and climate change impacts and the bill's performance in reducing emissions. The GAO is directed to report every three years on Federal agencies' administration of, and performance of, the programs established under titles III and IV of the bill.

Every five years, an interagency body will make recommendations to the President, and the President will in turn make recommendations to Congress, on changes to the framework established by the bill based on the NAS's and GAO's most recent findings and recommendations. Title VI also provides for expedited Congressional consideration of a presidential recommendation to tighten the bill's emissions cap if the NAS's scientific findings indicate such action is necessary.