

# Discussion Draft Summary THE AMERICAN CLEAN ENERGY AND SECURITY ACT OF 2009

The Waxman-Markey discussion draft, "The American Clean Energy and Security Act of 2009," is comprehensive energy legislation. The legislation will create millions of new clean energy jobs, save consumers hundreds of billions of dollars in energy costs, enhance America's energy independence, and cut global warming pollution.

The legislation has four titles: (1) a "clean energy" title that promotes renewable sources of energy and carbon capture and sequestration technologies, low-carbon transportation fuels, clean electric vehicles, and the smart grid and electricity transmission; (2) an "energy efficiency" title that increases energy efficiency across all sectors of the economy, including buildings, appliances, transportation, and industry; (3) a "global warming" title that places limits on the emissions of heat-trapping pollutants; and (4) a "transitioning" title that protects U.S. consumers and industry and promotes green jobs during the transition to a clean energy economy.

One key issue that the discussion draft does not address is how to allocate the tradable emission allowances that restrict the amount of global warming pollution emitted by electric utilities, oil companies, and other sources. This issue will be addressed through discussions among Committee members.

# TITLE I - CLEAN ENERGY

**Renewable Energy.** The draft promotes renewable energy by requiring retail electricity suppliers to meet a certain percentage of their load with electricity generated from renewable resources, like wind, biomass, solar, and geothermal. The renewable electricity requirement begins at 6% in 2012 and gradually rises to 25% in 2025. The governor of any state may choose to meet one fifth of this requirement with energy efficiency measures.

Carbon Capture and Sequestration. The draft promotes development of carbon capture and sequestration (CCS) technologies to ensure a continuing place for coal in our nation's energy future. CCS is a method of reducing global warming pollution by capturing and injecting underground the carbon dioxide emitted from electricity generation plants that use fossil fuels. The draft includes a CCS early demonstration program, incentives for the wide-scale commercial deployment of CCS, and performance standards for new coal-fired power plants.

**Clean Fuels and Vehicles.** The draft establishes a new low-carbon transportation fuel standard to promote advanced biofuels and other clean transportation fuels. It authorizes financial support in the form of grants or loan guarantees to cities, states, or private companies for large-scale demonstrations of electric vehicles. A related provision authorizes financial support to car companies to retool their plants to build electric vehicles.

**Smart Grid and Electricity Transmission.** The draft contains provisions to facilitate the deployment of a smart grid, including measures to reduce utility peak loads through smart grid and demand response

applications and to help promote smart grid capabilities in new home appliances. It also directs the Federal Energy Regulatory Commission to reform the regional planning process to modernize the electric grid and provide for new transmission lines to carry electricity generated from renewable sources.

**Partnering with the States.** The draft creates a program to allow each state energy office to establish a State Energy and Environment Development (SEED) Fund, which will serve as a common repository for federal financial assistance for clean energy and energy efficiency projects.

**Federal Purchases of Renewable Electricity.** The draft authorizes federal agencies to enter into long-term contracts to purchase renewable electricity.

## TITLE II – ENERGY EFFICIENCY

**Building Energy Efficiency.** The draft promotes energy efficiency in new buildings by providing federal training and funding assistance to states that adopt advanced building efficiency codes. It authorizes funding for retrofitting existing commercial and residential buildings to improve their energy efficiency. And it directs the Environmental Protection Agency to develop procedures for rating building energy efficiency.

**Manufactured Homes.** The draft provides rebates to low-income families residing in pre-1976 manufactured homes that can be applied toward purchases of new Energy Star-rated manufactured homes.

**Appliance Energy Efficiency.** The draft codifies four negotiated agreements on efficiency standards for lighting and four additional agreements for other appliances. It makes numerous improvements to the current Department of Energy process for setting energy-efficiency standards, strengthening the cost-effectiveness test to establish minimum standards and requiring improved disclosure. In addition, it creates a program to provide financial incentives to retailers who sell high volumes of "Best-in-Class" appliances.

Transportation Efficiency. The draft directs the President to work with the relevant agencies and California to harmonize, to the maximum extent possible, the federal fuel economy standards, any emission standards promulgated by EPA, and the California standards for light-duty vehicles. The goal of this provision is to preserve the environmental benefits that could be achieved by the three standards, but do so in a way that simplifies compliance by the auto companies. The draft also directs EPA to set emissions standards for other mobile sources of pollution such as locomotives, marine vessels, and nonroad sources. The draft requires states to establish goals for reducing global warming pollution from the transportation sector and requires large metropolitan planning organizations to submit transportation plans to meet those goals. The draft authorizes EPA to carry out the SmartWay Transportation Efficiency Program to increase the efficiency of highway trucking.

**Utilities Energy Efficiency.** The draft establishes a new energy efficiency resource standard to enlist electricity and natural gas distribution companies in the effort to make the nation more energy efficient. Under this program, each distribution company must demonstrate that its customers have achieved a required level of cumulative electricity or natural gas savings relative to business-as-usual projections. The efficiency standard starts with a 1% electricity savings and 0.75% natural gas savings in 2012 and gradually increases to a 15% cumulative electricity savings and a 10% cumulative natural gas savings by 2020.

**Industrial Energy Efficiency.** The draft requires the Secretary of Energy to establish standards for industrial energy efficiency and to seek recognition of the result by the American National Standards Institute. The draft also creates an award program for innovation in increasing efficiency of thermal electric generation process.

**Public and Federal Energy Efficiency.** The draft amends the Energy Independence and Security Act of 2007 to include nonprofit hospitals and public health facilities among public institutions eligible for grants and loans for energy efficiency. It also requires competition before task orders are awarded by federal agencies under energy savings performance contracts.

### TITLE III – REDUCING GLOBAL WARMING POLLUTION

The global warming provisions in the discussion draft are modeled closely on the recommendations of the U.S. Climate Action Partnership (USCAP), a coalition of electric utilities, oil companies, chemical companies, automobile manufacturers, other manufacturers and energy companies, and environmental organizations.

Global Warming Pollution Reduction Program. The draft establishes a market-based program for reducing global warming pollution from electric utilities, oil companies, large industrial sources, and other covered entities that collectively are responsible for 85% of U.S. global warming emissions. Under this program, covered entities must have tradable federal permits, called "allowances," for each ton of pollution emitted into the atmosphere. Entities that emit less than 25,000 tons per year of CO<sub>2</sub> equivalent are not covered by this program. The program reduces the number of available allowances issued each year to ensure that aggregate emissions from the covered entities are reduced by 3% below 2005 levels in 2012, 20% below 2005 levels in 2020, 42% below 2005 levels in 2030, and 83% below 2005 levels in 2050.

**Supplemental Pollution Reductions.** The draft directs EPA to achieve additional reductions in global warming pollution by entering into agreements to prevent international deforestation. By 2020, these supplemental reductions will achieve reductions equivalent to 10% of U.S. emissions in 2005. These are low-cost reductions in global warming pollution that can be secured by devoting approximately 5% of the allowance value to the program.

**Offsets.** The draft allows covered entities to increase their emissions above their allowances if they can obtain "offsetting" reductions at lower cost from other sources. The total quantity of offsets allowed in any year cannot exceed 2 billion tons, split evenly between domestic and international offsets. Covered entities using offsets must submit five tons of offset credits for every four tons of emissions being offset.

**Banking and Borrowing.** To provide additional flexibility without compromising environmental goals, the draft permits unlimited banking of allowances for use during future compliance years. The draft also establishes a rolling two-year compliance period, effectively allowing covered entities to borrow from one year ahead without penalty. Allowances from two to five years in the future can be borrowed under limited circumstances.

**Strategic Reserve.** The draft directs EPA to create a "strategic reserve" of about 2.5 billion allowances by setting aside a small number of allowances authorized to be issued each year thereby creating a cushion in case prices rise faster than expected. The draft directs EPA to make allowances from the reserve available through an auction when allowance prices rise to unexpectedly high levels. The proceeds of the auction will be used to purchase additional offsets that will replenish the strategic reserve.

Carbon Market Assurance and Oversight. The draft provides for strict oversight and regulation of the new markets for carbon allowances and offsets. It ensures market transparency and liquidity and establishes strict penalties for fraud and manipulation. The Federal Energy Regulatory Commission is charged with regulating the cash market in emission allowances and offsets. The President is directed to delegate regulatory responsibility for the derivatives market to an appropriate agency (or agencies), based on the advice of an interagency working group.

Additional Greenhouse Gas Standards. The draft directs EPA to set emission standards on sources that are not covered by the allowance system. In addition, it creates special programs to reduce emissions of two pollutants that contribute to global warming: hydrofluorocarbons (HFCs) and black carbon. HFCs are chemical products that are used in refrigeration, air conditioning, and insulation, among other things. The draft adds HFCs to the list of similar substances that EPA currently regulates because they deplete the ozone layer. Under this regulatory program, EPA will be directed to phase down the production of HFCs. Black carbon, or soot, is the product of incomplete combustion of fossil fuels or biomass. It is a major contributor to warming in the Arctic. EPA is directed in the draft to use its existing authority under the Clean Air Act to reduce emissions of black carbon domestically and study opportunities for reductions internationally.

Clean Air Act Exemptions. The draft provides that CO<sub>2</sub> and other greenhouse gases may not be regulated as criteria pollutants or hazardous air pollutants on the basis of their effect on global warming. The draft also provides that new source review does not apply to these global warming pollutants.

## TITLE IV – TRANSITIONING TO A CLEAN ENERGY ECONOMY

Ensuring Domestic Competitiveness. To ensure that U.S. manufacturers are not put at a disadvantage relative to overseas competitors, the draft authorizes companies in certain industrial sectors to receive "rebates" to compensate for additional costs incurred under the program. Sectors that use large amounts of energy, and produce commodities that are traded globally, would be eligible for the rebates. If the President finds that the rebate provisions do not sufficiently correct competitive imbalances, the President is directed to establish a "border adjustment" program. Under that program, foreign manufacturers and importers would be required to pay for and hold special allowances to "cover" the carbon contained in U.S.-bound products.

**Green Jobs and Worker Transition.** The draft includes several provisions to promote green jobs. One section authorizes the Secretary of Education to award grants to universities and colleges to develop curriculum and training programs that prepare students for careers in renewable energy, energy efficiency, and other forms of climate change mitigation. Under another section, the Secretary of Labor is authorized to carry out such training programs. The discussion draft also notes that a worker transition section remains to be provided.

**Consumer Assistance.** The discussion draft notes that a consumer assistance section remains to be provided.

**Exporting Clean Technology.** The discussion draft includes provisions to provide U.S. assistance to encourage widespread deployment of clean technologies to developing countries. The draft specifies that only developing countries that have ratified an international treaty and undertaken nationally appropriate mitigation activities that achieve substantial greenhouse gas reductions are eligible for funding.

Adapting to Global Warming. The draft establishes an interagency council to ensure an integrated federal response to the effects of global warming. The National Oceanic and Atmospheric Administration (NOAA) is directed to conduct vulnerability assessments and establish a National Climate Service. Each federal agency is directed to prepare an adaptation plan, review climate impacts on matters within its jurisdiction, and develop plans for addressing those impacts. The draft establishes a climate change adaptation fund to provide federal support for state, local, and tribal adaptation projects and a natural resources climate change adaptation panel to coordinate interagency actions on natural resources adaptation. The draft also requires the Secretary of Health and Human Services to promulgate a national strategy for adapting to the public health effects of climate change.

To address international adaptation issues, the draft creates an International Climate Change Adaptation Program within USAID to provide U.S. assistance to the most vulnerable developing countries for adaptation to climate change.