

July 8, 2009

House Passes American Clean Energy and Security Act

On June 26th, the House of Representatives narrowly passed the American Clean Energy and Security Act ("ACES"), H.R. 2454. The bill will next be considered by the Senate, with some predicting a full Senate vote held in October. Because of the significance of this bill and the material effect it will have on many sectors of the economy, we thought it would be useful to summarize the House-passed version. As discussed below, views of the bill vary widely, but there appears to be little disagreement that the passage of a climate change bill will have a significant impact on our economy and on how we live our lives.

Representative Ed Markey (D-MA), one of the bill's sponsors, stated: "...the House has passed the most important energy and environment bill in our nation's history...This legislation will create jobs by the millions, save money by the billions and unleash investment in clean energy by the trillions." House Minority Leader John Boehner (R-OH) had a different view, stating: "[the bill] will be a bureaucratic nightmare overseen by a confusing web of government agencies that will take and redistribute trillions of dollars from family budgets and workers' payrolls."¹ Not surprisingly, environmental groups and business groups also hold differing views.

The Natural Resources Defense Council stated: "The passage of this legislation...will help set our country in a new direction...While passing the bill through the House took hard work and compromises on many sides, this is strong and vital legislation that Congress needs to deliver to the President's desk this year. This bill will help create new jobs in manufacturing and clean technology. It will increase energy efficiency, help consumers save on energy bills, and protect lower-income families. And it will finally put our country on a course to limit the carbon pollution that causes global warming."²

The U.S. Chamber of Commerce, on the other hand, believes "[the bill] is a 1,200-page behemoth consisting of a cap-and-trade program for greenhouse gas emissions, a federal renewable electricity mandate, and a suite of new mandatory energy efficiency standards [and] will impose 397 new federal regulations (which require traditional federal agency rulemakings) and 1,060 new mandates on an American public already overwhelmed by extensive federal regulation."³

On the bill's passage, President Obama commented: "Today, the House of Representatives took historic action with the passage of the American Clean Energy and Security Act. It's a bold and necessary step that holds the promise of creating new industries and millions of new jobs; decreasing our dangerous dependence on foreign oil; and strictly limiting the release of pollutants that threaten the health of families and communities and the planet itself. Now it's up to the Senate to take the next step. And I'm confident that in the coming weeks and months the Senate will demonstrate the same commitment to addressing what is a tremendous challenge and an extraordinary opportunity."⁴

¹ Press Release, Rep. Ed Markey, House Passes Historic Waxman-Markey Clean Energy Bill (June 26, 2009) (<http://markey.house.gov>).

² Press Release, Natural Resources Defense Council, House Passes ACES: A Dramatic Breakthrough for Clean Energy and Climate Protection (June 26, 2009) (www.nrdc.org).

³ Press Release, U.S. Chamber of Commerce, U.S. Chamber Calls House Climate Change Bill Wrong Approach to Slowing Emissions (June 26, 2009) (www.uschamber.com).

⁴ Press Release, The White House, Statement By The President on House Passage of The American Clean Energy And Security Act (June 26, 2009) (www.whitehouse.gov).

With all the controversy surrounding ACES, it is by no means certain that Congress ultimately will pass climate change legislation. However, there are at least two cogent reasons why comprehensive federal legislation is in the interests of corporate America: to establish rules of the game that will allow companies to make better decisions regarding greenhouse gas management; and to preclude the Environmental Protection Agency (“EPA”) from developing and implementing climate change rules under the current version of the Clean Air Act, which most believe is an ill-suited vehicle for regulating greenhouse gases. We will continue to track ACES as well as related legislative, regulatory, and market-driven developments that are resulting in so-called carbon constraints—practical restrictions on activities that, directly or indirectly, result in emissions of greenhouse gases. Further information on carbon constraints can be found in the environmental publications section of our web site.

Most generally agree that significant changes are likely to be made by the Senate when it takes up ACES, but it appears that the provisions of ACES will form the starting point for the Senate’s activities. Below we summarize the key provisions of ACES. Our summary is organized according to the titles of ACES: Title I—Clean Energy; Title II—Energy Efficiency; Title III—Reducing Global Warming Pollution; Title IV—Transitioning to a Clean Energy Economy; and Title V (added by amendment)—Agricultural and Forestry Related Offsets.

Title I—Clean Energy

- Sets a national renewable electricity standard requiring retail electric suppliers to meet electricity savings targets and submit federal renewable energy credits.
- Promotes development of large-scale carbon capture and sequestration projects.
- Supports the use of Smart Grid technologies to save energy and reduce green house gas emissions, while also requiring certain load-serving entities to set peak demand reduction goals.
- Supports the development of plug-in electric vehicles and other advanced technology vehicles through incentives and mandates.
- Provides tax credits for fleet vehicles able to run on certain fuels.
- Establishes State Energy and Environmental Development Accounts, to hold and use the proceeds from emission allowances provided to states for renewable energy and energy efficiency purposes.
- Invests billions of dollars to advance promising clean technologies from the early stages of research through development, manufacturing, and commercial deployment.

Combined Efficiency and Renewable Electricity Standard

ACES generally requires, with few exceptions, that in the years 2012 through 2039, each retail electric supplier must annually demonstrate electricity savings and submit federal renewable energy credits. The electricity savings target gradually increases from 6 percent of the retail electric supplier’s base amount to 20 percent by 2021. The required number of federal renewable energy credits also gradually increases, and can alternatively be satisfied with cash payments. The provisions also give states authority to require utilities to purchase renewable energy at a specified rate as part of a renewable-energy production incentive program.

Carbon Capture and Sequestration

ACES establishes a national strategy and provides funding to address commercial scale deployment of carbon capture and sequestration (“CCS”) technologies, which could benefit certain oil and gas service companies that support CCS services. EPA, in consultation with the Department of Energy, must set forth a strategy to address barriers to commercial scale deployment of CCS.

The Act also authorizes the creation of a Carbon Storage Research Corporation (“CSRC”) that would support commercial scale demonstrations of carbon capture and storage or conversion. This CSRC would collect a fee from distribution utilities for all fossil fuel-based electricity delivered directly to retail consumers; these funds would be directed to accelerate the development of carbon capture and sequestration technologies.

ACES also requires EPA to promulgate regulations that would distribute cap-and-trade emission allowances to support the commercial development of CCS. It also amends the CAA to set a CO₂ emission standard for certain coal-fired power plants. The standard requires a 50 percent reduction in annual CO₂ emission for plants initially permitted through 2019 and a 65 percent reduction for plants initially permitted after 2020.

Clean Transportation

To promote the development and eventual use of plug-in electric drive vehicles, ACES creates a variety of tax incentives, mandates, and regulations, primarily focusing on the development of the infrastructure (e.g., charging stations, battery exchanges) to support such vehicles. States and utilities are required to make charging stations interoperable with the products of all automobile manufacturers to the extent possible. The Act allows States and utilities to recover their costs in planning for and implementing electric drive vehicle infrastructure. Utilities have three years to begin considering, and four years to decide, how to integrate electric drive vehicles into Smart Grid technology.

The Secretary of Energy is directed to establish a large-scale program to deploy and integrate electric drive vehicles in multiple regions, to demonstrate the viability of such vehicles, advance their technology, and show the benefits of electric drive vehicle use. The Secretary may award funds to defray the higher cost of new electric drive vehicles over standard engine vehicles. Funds are also provided to support development of electrical charging infrastructure and Smart Grid equipment and infrastructure.

The Department of Energy is authorized to promulgate regulations requiring automobile manufacturers to ensure that a certain percentage of their new vehicle fleet will have engines capable of running on 85 percent ethanol or methanol blended fuels. To further promote alternative fuels, ACES creates tax credits for fleets that convert existing vehicles to operate on alternative fuels.

State Energy and Environment Development Accounts

ACES creates State Energy and Environment Development Accounts (“SEED Accounts”). SEED Accounts will “serve as a common state-level repository for managing and accounting for emission allowances provided to states designated for renewable energy and energy efficiency purposes.”

Funds derived from the sale of state emissions allowances (provided to states under the new cap-and-trade program) may be placed in a financial account associated with the state’s SEED account. All funds in a SEED account must be used to support renewable energy and energy efficiency programs. The use of such funds is partially discretionary. A portion (“dedicated allowances”) must be used for specific purposes; “undedicated allowances” may be used for a variety of purposes, including loans, grants, and other forms of support for renewable energy or energy efficiency authorized by the federal government.

Of the allowances and funds, 12.5 percent must be distributed to local governments to be used to support energy efficiency and renewable energy. Another 20 percent will be used to implement and enforce building codes to support energy efficiency, the energy efficient manufactured homes program, the building energy performance labeling program, low-income community energy efficiency assistance programs, and the Retrofit for Energy and Environmental Performance (“REEP”) program. An additional 20 percent will be used for capital grants, tax credits,

loans and loan guarantees, and other incentives to support the re-equipping or retooling of factories to support or generate renewable energy.

Smart Grid Advancement

ACES contains substantial support for the development and implementation of Smart Grid technologies. It provides for an assessment of the potential for cost-effectively integrating Smart Grid technologies and capabilities into all potential Energy Star products focusing on the potential energy and greenhouse gas savings that could result if Smart Grid capability were installed and utilized on such products. In addition, the Federal Trade Commission is directed to consider through rulemaking whether Energy Guide labels on electronics should identify any Smart Grid features and their benefits.

ACES requires that load-serving entities (or states if they so elect) set peak demand reduction goals for any load-serving entities with an applicable baseline in excess of 250 megawatts, and develop a plan to meet such goals through energy efficiency measures or use of a Smart Grid. It also provides for the development of a methodology for adjusting or normalizing baselines to reflect environmental changes and other factors external to peak demand management.

Transmission Planning

ACES amends the Federal Power Act to require adoption of national electricity grid planning principles that facilitate the deployment of renewable and zero-carbon energy. The Federal Energy Regulatory Commission will support and assist the grid-planning processes for regional transmission planning entities willing to incorporate these principles. Regional electric grid plans will be submitted to the Commission for review within 18 months after the principles are established, and at least every three years thereafter. The Commission may hold multi-regional meetings to discuss plan consistency and integration and resolve conflicts.

ACES also requires utilities to offer interconnection and net metering to Federal Government agencies, offices, or facilities (but only if the utility sold over 4 million megawatt hours of electricity the previous year), and provides related requirements (e.g., safety and billing). It also requires that the rates, charges, and terms for the sale of electric energy to the Federal Government or agency must be the same as if they did not own or operate a qualified generation unit and use a net metering system.

ACES amends the Energy Policy Act of 2005 to extend certain loan guarantees to qualifying electric transmission facilities placed in service before 2017. It further authorizes the Secretary of Energy to provide grants for up to 50 percent of costs incurred in connection with the development, construction, and engineering of qualified advanced electric transmission property.

Energy and Efficiency Centers and Research

ACES proposes the establishment of eight “Energy Innovation Hubs” under the auspices of the Department of Energy. The Hubs will be cross-disciplinary partnerships among research universities, federal and state agencies and nonprofit organizations to develop and transfer clean energy technologies to the marketplace through grants to corporations and nonprofit organizations. Each Hub will have a unique area of focus, such as solar electricity, batteries and energy storage, electricity grid systems and devices, and other areas to be designated by the Secretary of Energy.

ACES allocates funds to the Advanced Research Projects Agency-Energy, or ARPA-E, a division of the Department of Energy, for acceleration of novel early-stage research and promotion of commercial applications of

this research. The funds will be distributed on a competitive basis to institutions of higher education, private companies, research foundations, trade and industry research collaborations, or consortia of such entities.

Nuclear and Advanced Technologies

ACES creates the Clean Energy Deployment Administration, or CEDA, which will be authorized to provide a suite of financing options, including loans, letters of credit, loan guarantees, insurance products and other financial products, directly to private and public entities to help them deploy clean technologies. CEDA is to help remedy the lack of available financial support for developing and deploying clean energy technologies by providing financing directly and through partnerships with private entities. CEDA will also be authorized to provide indirect financing through provision of credit support to portfolios of taxable debt obligations originated by state, local and private sector entities that enable the deployment of clean energy technology. ACES does not specify eligible technologies, but supporters have stated that advanced nuclear and renewable energy projects, as well as carbon capture and storage, would qualify. ACES does specify, however, that CEDA must adopt a "portfolio investment approach" to ensure no particular technology receives more than 30 percent of the total funding available. CEDA will be funded through a \$7.5 billion clean energy investment fund.

Title II—Energy Efficiency

- Allows EPA to require reductions in greenhouse gas emissions from heavy duty motor vehicles and non-road engines.
- Sets energy efficiency targets for residential and commercial buildings and provides for lighting and appliance energy efficiency programs.

Building and Appliance Energy Efficiency Programs

ACES sets building code energy efficiency targets for residential and commercial buildings targeting a 30 percent to more than 50 percent reduction in energy use relative to a comparable building constructed in compliance with a baseline code. It requires EPA to implement standards for a national building retrofit policy for residential and non-residential buildings. The Department of Energy is required to establish a building energy performance labeling program for residential and commercial markets. ACES also provides grant programs for tree planting aimed at reducing energy consumption related to the impacts of wind and the sun. It also provides for lighting and appliance energy efficiency programs, addressing both water and energy efficiency.

Transportation Efficiency

ACES expands on EPA's announced plans to propose GHG emission limits for automobiles, by requiring EPA to promulgate GHG emission limits for new heavy-duty motor vehicle engines by the end of 2010. The new limits would be "technology forcing" as EPA is directed to base the new regulations on emission control technologies it believes will be available for the model year for which the regulations are set. EPA is also directed to determine what classes of new non-road vehicles and engines should be subject to similar technology forcing GHG emission limits and promulgate those limits by the end of 2012. EPA is authorized to provide for averaging, banking, and trading of GHG emission credits within or across the types of vehicles and engines that are regulated.

ACES also directs EPA to study the feasibility of establishing a national program for measuring, disclosing, and labeling products for their carbon content and to develop a voluntary product carbon disclosure program.

Title III—Reducing Global Warming Pollution

- Establishes a carbon cap-and-trade program for greenhouse gas (“GHG”) emissions, to result in an 83 percent reduction in GHG emissions 2005 levels by 2050.
- Allocates, rather than auctions, a majority of the emission allowances in the early years of the program.
- Limits applicability of existing federal laws, including many Clean Air Act programs and state and local laws, to GHG.

Reducing Global Warming Potential

In what has been a hotly debated move, ACES creates a carbon cap-and-trade program to limit GHG emissions from certain categories of emitters. The addition of Section 722 to the Clean Air Act (“CAA”) is the crux of the cap-and-trade System:

“...effective January 1, 2012, each covered entity is prohibited from emitting greenhouse gases and having attributable greenhouse emissions, in combination, in excess of its allowable emissions level.”

These words have been, and surely will be, the subject of a great deal of interest. It is estimated that this program will cover 85 percent of all GHG emissions in the United States. A covered entity’s allowable emissions level is the sum of allowances and offsets held by the entity. The provisions set forth a specific amount of emission allowances starting in 2012 at 4,627 millions of tons of carbon dioxide equivalent (or approximately 97 percent of 2005 levels) and will reduce to a low in 2050 of 1,035 million tons (or 17 percent of 2005 levels). The cap-and-trade requirements phase in over time, impacting electric generation in 2012, many industrial sources in 2014, and natural gas and fossil-fuel in 2016.

Covered entities may use emission offsets to cover portions of their emissions. The total amount of offsets is limited to 2,000 million tons annually (half from domestic sources and half from international sources). Any individual covered source may use offsets up to a maximum percentage which is set by the total amount of offsets compared to the total amount of allocated emissions. In other words, as the allocated emission decreases, the percentage allowed for offsets increases. In real terms, approximately 1/3 of emissions allowances may be obtained through offsets in 2012.

The holder of an emissions allowance, whether allocated or through an offset, may freely sell, exchange, transfer or hold for compliance any of these allowances. The market for carbon allowances and offset credits is expected to be a large market. The statute provides for banking and borrowing of emissions allowances as well. The penalty for excess emissions above the allowances held by an entity is twice the “auction clearing price” for the emissions allowances.

The statute allows for the EPA Administrator to create a “strategic reserve” of emissions allowances that may be auctioned by the Administrator according to parameters set forth in the statute. The proceeds of such auctions are to be deposited in a “strategic reserve fund.” The strategic reserve of allowances will give the Administrator tremendous influence over the emissions allowances market and the energy markets analogous to the Federal Reserve’s control over the monetary supply.

The statute creates an Offsets Integrity Advisory Board which, together with the Administrator, will promulgate specific requirements for offset projects and the mechanism for the approval and verification of offset projects.

Finally, the statute provides for the use of emissions allowances to create “supplemental emissions reductions through reduced deforestation” in the U.S. and developing countries. Special provisions, summarized below, deal with agricultural and forestry offsets.

ACES sets forth a series of reports that the EPA Administrator, in collaboration with the National Academy of Sciences, must deliver to different federal agencies at specific points in time. These reports will give the status of the cap-and-trade program and other GHG reduction efforts and specifically identify the properties and quantity of each different GHG. These provisions identify seven specific GHGs and provide a mechanism for the Administrator to determine additional GHGs, as well as the conversion rate of all GHGs into their carbon dioxide equivalent on the basis of their global warming potential. Parts of the data gathered, along with the required reporting of covered entities, are to be assembled in a “climate registry” that collects and organizes greenhouse gas emission data across the country. This reporting requirement will create a new obligation in many cases for businesses to publicly report their GHG emissions data.

Disposition of Allowances

ACES provides for a substantial portion of emission allowances to be allocated without charge, rather than a one hundred percent auction as discussed in early versions of the bill. A portion of these allowances are intended to be allocated, presumably to defray the potential economic impact of cap-and-trade on electricity, natural gas, and low income consumers, and trade-vulnerable industries. Allowances also would be allocated for deployment of CCS technology, investment in clean vehicle technology and wildlife and natural resources adaptation. The amount of allowances allocated, as opposed to auctioned, decreases over time. ACES also allows for the distribution of emission allowances to such companies as natural gas local distribution companies for the benefit of retail ratepayers; and petroleum refineries in a manner that promotes energy efficiency and a reduction in GHG emissions at such facilities.

ACES addresses the difficult question of how to handle “offsets” created by companies making pre-ACES GHG reductions under voluntary or State-mandated programs. The requirements will be detailed by regulations to be issued by EPA, but generally provide that up to one percent of the 2012 allowances may be allocated to compensate for early reductions.

Additional Greenhouse Gas Standards

Addressing to what extent greenhouse gases may also be regulated under certain existing laws and by states and political subdivisions is critically important to garnering support from the business community. ACES addresses how the new greenhouse gas regulatory system will mesh with existing FCAA requirements. There is concern that under existing law, EPA may regulate or be legally forced to regulate GHG emissions (particularly carbon dioxide) under one or more of the existing CAA air quality programs. This would likely include the air permitting programs which could force a voluminous number of smaller sources such as schools, apartment complexes, and retail stores to obtain preconstruction permits for new or modified sources and operating permits for all existing sources. These types of sources are currently exempt from the permitting requirements based upon their levels of emissions of regulated air pollutants.

Under ACES, the air permitting (for sources initially permitted or modified after January 1, 2009), the international air pollution, and the hazardous air pollutant programs would not be applicable to GHG emissions based upon their effect on global warming. Additionally, EPA could not add GHGs (based upon their effect on global climate change) to the list of criteria air pollutants regulated under the National Ambient Air Quality Standards program.

Sources that emit more than 25,000 tons per year of carbon dioxide equivalent GHGs which are subject to the cap-and-trade program will not be subject to promulgation of New Source Performance Standards ("NSPS"). ACES directs EPA to develop NSPS for sources that are not part of the cap-and-trade program but emit more than 10,000 tons per year of carbon dioxide equivalent GHG. EPA is directed to first identify categories of sources that will be subject to the NSPS and then promulgate the actual standards in a phased manner from three to ten years after the enactment of the bill.

ACES contains detailed provisions concerning GHGs that are hydrofluorocarbons ("HFCS"). Certain HFCS used as refrigerants in air conditioners and appliances are already regulated under international treaty and the CAA. The bill directs EPA to divide HFCS into two groups of Class II substances. Class II substances are already on a phase-out schedule under the current CAA. Under the bill, EPA will develop a phase down schedule for the Class II Group II substances using a cap-and-trade system, with offsets. The requirement to hold allowances for the Class II Group II substances under the cap-and-trade program commences in 2012. Allowances will be allocated through a combination of an auction and fixed price sales with the percentage of the allowances distributed through the auction to increase over time. Revenues generated by the auction and sale of allowances will be placed into a newly created Stratospheric Ozone and Climate Protection Fund. The bill authorizes EPA to establish exemptions to benefit users of medical devices and for the purposes of aviation and space safety.

The bill directs EPA to study and, if appropriate to protect the global climate, to require reductions in emissions of black carbon. Black carbon, often called soot, is emitted from the combustion of fossil fuels (particularly diesel fuel) and biomass.

Another significant factor in gaining support of the business community is the issue of whether states and local governments could maintain existing or develop new greenhouse gas regulatory requirements that might be different from the federal regulatory system established by the bill. In response, ACES provides that no state or political subdivision may implement or enforce a GHG cap-and-trade program that covers any emissions that occur in the years 2012-2017. This preemption provision, however, does not preclude states or political subdivisions from requiring reductions in GHG emissions—it merely precludes use of a cap-and-trade system.

ACES amends the Federal Power Act to provide oversight and regulation of new markets for trading allowances and offsets. EPA, FERC and the Commodities Futures Trading Commission have roles in this oversight and regulation.

Carbon and Other Market Assurance

ACES places new requirements on certain transactions in derivatives involving energy commodities; for example, it extends regulatory authority to include energy swap transactions and energy transactions on foreign boards of trade, and eliminates the exemption for over-the-counter energy commodity swaps. It also requires the Commodities Futures Trading Commission to disaggregate related market data and report it publicly on a weekly basis. ACES additionally reaches beyond energy and climate change markets to impose additional regulations on credit default swaps.

Title IV—Transitioning to a Clean Energy Economy

- Provides a “border adjustment” on certain imported products.
- Creates a national climate change adaptation program and a natural resource adaptation program to help mitigate negative impacts of climate change.
- Provides worker adjustment assistance for workers in particular industries that are negatively impacted by climate change legislation.

International Trade Provisions

ACES contains controversial provisions imposing a “border adjustment”, starting in 2020, on certain types of products from countries that do not limit GHG emissions. The President has authority to waive the tariff, but only if he gains congressional approval.

Green Jobs and Worker Transition

ACES provides grants to eligible partnerships to develop programs of study focused on emerging careers and jobs in renewable energy, energy efficiency, and climate change mitigation. Priority is given to programs that use online learning or other innovative delivery methods and focus on low performing students and special populations.

ACES also provides climate change worker adjustment assistance for workers certified as eligible by the Secretary of Labor. The adjustment assistance will be available to workers in the energy section, consumer goods manufacturing, or any industry the Secretary determines is adversely affected by any requirement of the new cap-and-trade provisions of the Clean Air Act. Such adverse effects may include a decrease in sales, production, or delivery of goods or services due to the shift from reliance upon fossil fuels, a substantial increase in the cost of energy required for a manufacturing facility to produce items whose prices are competitive in the marketplace, or another documented occurrence the Secretary determines is an indicator of an adverse impact on industry created by the cap-and-trade program. Eligible workers would be able to receive a climate change adjustment allowance as well as employment services and training, job search allowances, relocation allowances, and health insurance continuation. These benefits would be in lieu of any other unemployment insurance.

Adapting to Climate Change

ACES calls for the creation of a National Climate Change Adaptation Program to protect, restore, and conserve natural resources to enable them to become more resilient, adapt to, and withstand the impacts of climate change and ocean acidification. The program will distribute allowances to states based on population and per capita income. States must sell the allowances and deposit the proceeds into the State Energy and Environment Development (“SEED”) account.

The states are to use the proceeds of sales of these emission allowances exclusively for the implementation of projects, programs, or measures to build resilience to the impacts of climate change. Priority is given to projects designed to reduce flood events. Prior to receiving any allowances, each state must submit a climate adaptation plan to identify and prioritize specific cost-effective projects, programs, and measures to build resilience to predicted impacts of climate change.

ACES tasks the Chair of the Council on Environmental Quality to help create a Natural Resources Climate Change Adaptation Strategy to provide financial support and incentives for programs, strategies, and activities that protect, restore, and conserve natural resources in response to the threats of climate change and ocean acidification.

ACES provides new and additional assistance from the United States to the most vulnerable developing countries, including the most vulnerable communities and populations therein, in order to support the development and implementation of climate change adaptation programs and activities. Funding is to be provided through bilateral assistance, multilateral funds or international institutions, or some combination of both.

Title V—Agricultural and Forestry Related Offsets

- Gives the Secretary of Agriculture broad authority to develop, approve, and award offsets for carbon reduction practices in agriculture.

In response to concerns voiced by representatives from heavily agricultural areas, ACES was amended to specifically provide for agricultural and forestry offsets and to give the Department of Agriculture authority over this aspect of the offset program.

Late-added provisions to ACES require the Secretary of Agriculture to establish a program governing the generation of offset credits from domestic agricultural and forestry sources. The initial list of eligible domestic agricultural and forestry offset practices includes agricultural practices in three broad categories: (1) agricultural, grassland, and rangeland sequestration and management practices; (2) changes in carbon stocks attributed to land use change and forestry activities; and (3) manure management and disposal.

The Secretary must ensure that offset credits represent verifiable and additional reductions, avoidance, or sequestration, and that sequestration offsets result in permanent net reduction in atmospheric GHGs. The Secretary must establish the rules and methodology for the offsets, including establishing baselines, quantification methods and accounting for leakage.

To address concerns from the alternative fuels industry, late-added amendments to ACES expand the types of “renewable biomass” that can be used for biofuels. ACES further specifically excludes indirect land use changes that occur outside the country where a biofuel feedstock is produced from consideration in the lifecycle GHG emissions analysis for renewable fuels.

Further information on carbon constraints can be found in the [Environmental Publications section](#) of our web site. For more information, please contact:

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