

Domestic Offsets and the Carbon Conservation Program in the American Power Act of 2010



Summary & Recommendations | May 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), relies on offsets to reduce the global concentration of greenhouse gases (GHGs) and lower the cost of the program. While offsets can and should play an important role in cost-effective cap and trade systems, standards must be rigorous and properly administered to ensure that an offset is truly delivering emission reductions. This summary provides: (1) a brief overview of domestic offset and Carbon Conservation Program provisions in APA; (2) detailed section-by-section summaries of these provisions; and (3) recommendations for strengthening the bill through increased rigor for the offset program and funding for the carbon conservation program. International offset provisions are summarized in ENE's full APA summary. (For summary and other related resources, see [Federal Cap and Trade page](#) on ENE's Web site.)

1. Offset and Carbon Conservation Overview

Under the *American Power Act*, regulated entities other than petroleum-based fuel providers may use up to 2 billion offsets to meet compliance obligations. Offsets must originate from projects outside of the regulated (capped) sector and an initial list of qualifying offset types is provided in the legislation. Offsets must be additional, measurable, verifiable and enforceable.

Within APA, regulatory authority over the offset system is shared by The Department of Agriculture (USDA) and the Environmental Protection Agency (EPA). USDA is responsible for promulgating protocols, determining eligible project types, and for approving and verifying offset projects within the agricultural and forestry sectors. EPA is responsible for all other offset types. EPA also is responsible for issuance of credits, oversight of the offset registry and periodic program review.

In order to provide a source of early offset supply, the program requires EPA and USDA to approve mandatory and voluntary offset programs in existence prior to January 2009 that meet certain standards. Projects from approved programs may provide credits from emissions reductions occurring after January 2004.

Emissions from projects covered by the offset program will not be subject to any other federal law regulating greenhouse gas emissions until January 1, 2020.

In Title IV, the Carbon Conservation Program plays a key role by providing an alternative funding stream for emission reduction projects that cannot meet offset requirements. The program provides incentives for sequestration on agricultural and forest land through three mechanisms: (1) 10-year carbon contracts; (2) permanent conservation easements; and (3) timber and grazing contracts on federal land. The program is not funded through allowance revenue, but through the appropriations process. Therefore total reductions and sequestration resulting from this program remain unclear.

2. Detailed Summary of APA Domestic Offset and Carbon Conservation Provisions

| | |
|-----------------|---|
| TITLE II | GREENHOUSE GAS POLLUTION REDUCTION PROGRAM |
| Sec. 2001 | <i>Reducing Greenhouse Gas Pollution:</i> amends the Clean Air Act (CAA) to create a greenhouse gas cap and trade system |
| Part C | Program Rules (new CAA section numbers are listed) |
| Sec. 2001 | <i>Prohibition of Excess Emissions:</i> |

| | |
|------------------------|--|
| (CAA 722) | <ul style="list-style-type: none"> • Up to 2 billion tons of offsets annually can be used for compliance • 1 domestic offset or 1.25 international offsets in lieu of emissions allowance (before 2018 1 international offset may be used in lieu of emission allowance) • 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 |
| 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) | Advisory Committee <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) | Establishment of Domestic Offsets Program: USDA and EPA promulgate regulations to establish offset program <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) | Eligible Projects <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 | Requirements for Offset Projects |

| | |
|------------------------|---|
| (CAA 735) | <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 not meet requirements, and also may revoke approval of a program if it does not meet |

| | |
|--------------------------|---|
| | <p>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 |
| Subtitle F | Miscellaneous |
| Sec. 2501 (CAA 807) | <p><i>Forestry Sector Greenhouse Gas Accounting</i></p> <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 |
| TITLE IV | JOB PROTECTION AND GROWTH |
| 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 |

| | |
|--|---|
| | <p>emissions avoided through the various contract mechanisms; reversals, and; total number of acres by method and by state</p> <ul style="list-style-type: none"> • 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 |
|--|---|

3. Reactions and Recommendations

ENE believes that a limited quantity of rigorous offsets should be included in cap and trade programs to increase flexibility and reduce costs. Creating a domestic forest carbon offsets market in a cap and trade climate program can help reduce emissions, enable landowners to participate in a low carbon economy and provide a cost-containment mechanism for cap and trade. However, it is essential that the offset program standards are rigorously crafted, or real emissions reductions will not reliably occur and the emissions cap will be undermined, particularly given the large number of offsets allowed.

The Carbon Conservation Program plays a key role by providing an alternative funding stream for projects that cannot meet strict offset requirements. This is essential for the participation of smaller landowners who may have difficulty with offset transaction costs. Projects that have carbon value but cannot meet offset requirements can receive fair and appropriate compensation through a well-funded program.

Domestic Offset Program

1. **Roles of USDA and EPA.** APA provides welcome integration of the USDA and U.S. EPA roles into a unified offset program with one advisory committee. Given USDA’s long-standing experience and relationships in the agriculture and forest sectors, it has an important role to play in developing suitable program methodologies and effective outreach and implementation for agriculture and forestry offsets. However, U.S. EPA also has an important role to play in developing protocols for these offset types because of its overarching regulatory mandate to ensure the integrity of the cap and trade program. While extensive inter-agency cooperation is appropriate, CAA Sec. 733-740 must explicitly retain EPA’s authority to ensure the integrity of the offset program, including primary oversight on final program methodologies (CAA Sec. 735) and eligible project types (CAA Sec. 734) to ensure that real, additional, permanent and verifiable emissions reductions do occur.
2. **Offset limits.** The use of emissions reductions from offset projects should be reduced from the current limit of 2 billion. This limit allows for emissions in the capped sectors to increase by up to 44% above the cap in early years, and by more than 100% after 2042. While these emissions will all theoretically be offset by reductions elsewhere, this could significantly weaken the intent of the legislation to drive reductions in the covered sectors. A 44% increase in emissions in the capped sectors is much higher than projected business as usual (BAU) increases for emissions in these sectors in the first decade of the program. Because petroleum-based fuel providers cannot use offsets for compliance purposes, covered entities in the electricity sector and other sectors can meet their compliance obligations with an even greater percentage of offsets, further justifying a reduction in allowable offsets.

Instead, the bill should direct EPA to calculate the approximate reductions that the cap will require (i.e. the difference between BAU projections and the cap), and offsets should be limited to half that amount on an annual basis. If this is infeasible, annual limits on allowable use of offsets should be adjusted downward to account for the fact that transportation fuel providers are not allowed to use offsets for compliance.

3. **Permanence and reversals.** CAA Sec. 735 requires accounting and replacement of offset credits that become invalid because sequestered carbon is re-released into the atmosphere, either intentionally or unintentionally through natural disturbances, (“reversals”). However, the domestic offset program does not specifically require “permanence” and the reversal provisions do not provide sufficient clarity over what time period reversals must be monitored. CAA Sec. 753 requires permanence for international offset projects, although it does not define what this means. We view the permanence standard as being at least 100 years. Anything less than this must be fully replaced. Provisions for contract flexibility potentially allow the use of sequential, short term projects to maintain offset longevity. Sequential, short-term offset contracts present unique challenges to permanence for forest projects that are normally managed over long cycles, such as in northern hardwood forests where the rotation length can be 80-120 years. Short-term contracts will also add complexity and cost to monitoring and verification of credits, significantly increasing the administrative burden. Therefore, they should not be allowed.
4. **Additionality.** CAA Sec. 735 requires that projects must exceed an activity baseline that represents business as usual behavior in order to be considered additional. This requirement is essential. Historical baselines, which simply measure carbon on the ground at the project start date, are only appropriate when this reflects business as usual management. If USDA establishes a historical baseline for agricultural and forestry projects as permitted in CAA Sec. 735, other data sources should be included in assessing additionality, such as those related to management practices and land use trends in the region. Temporal baselines should at least have similar requirements to those established in the provisions for international avoided deforestation offset projects (CAA Sec. 756). National deforestation baselines must consider average annual historical rates of deforestation over at least 5 years, along with other relevant drivers of deforestation.

CAA Sec. 735 also stipulates that receipt of payment for non-carbon ecological services and conservation should not preclude a project from receiving offset credits. This should be true only to the extent that the existing payments are not paying for the same activities the offset project would claim credit for. For example, a project area that is subject to a conservation easement that does not specifically address carbon still should not be able to sell offset credits from avoided conversion but it may be able to sell the credits from changing timber management activities on the property if the easement does not specify the type of management that may occur. CAA Sec. 735 also specifies that an assessment of legal additionality should only consider regulations, not private contracts. If existing contracts require landowners to undertake specific practices, these practices cannot be considered additional.

5. **Environmental safeguards.** We are pleased to see environmental safeguards in CAA Sec. 735 added to the offset language originally proposed in S. 2729. They are critical to ensure that an offset program does not have unintended negative consequences for conservation and biodiversity. However, an additional requirement for forestry projects to be managed according to widely accepted sustainable forest management guidelines should be added, such as the provision contained in HR 2454 CAA Sec. 741, and preserved in the international offset provisions of this bill (CAA Sec. 762).
6. **Early action programs.** Current offset programs vary in quality, and it is thus essential that the criteria for determining eligibility of programs and project types under CAA Sec. 740 should meet the quality standards of the federal program. While the ability of the EPA and USDA to approve programs only on a limited basis and revoke approval is essential, it would be preferable if they were given discretion to exclude programs due to inadequate protocols up front, rather than approve and later revoke. Carbon reductions that do not meet the standards set out in Sec. 735 should seek qualification under non-offset incentive programs such as the Carbon Conservation Program in Title IV. The use of early action offsets should also be limited in relation to the overall size of the cap and the offset program, or there will be little economic incentive for new offset projects under cap and trade.
7. **National Inventory and Program Review.** The current U.S. national inventory for land use, land use change and forestry could be greatly improved by, among other things, increasing the number, frequency

of monitoring, and stratification of FIA data plots, and much better incorporation of remote sensing data. This would serve many purposes, but importantly would allow for better tracking of overall program effectiveness and provide better data to support offset and carbon conservation projects. Accordingly, the accounting program described in CAA Sec. 807 would be more effective if it augmented the scope and funding of existing data collection programs, rather than relying on existing appropriations. Furthermore, the results of the annual inventory should be referenced in the 5-year review of the offset program conducted by the Advisory Committee, as described in CAA Sec. 732.

Carbon Conservation Program

1. **Funding.** The carbon conservation program has not received any allowance allocation, and instead is to be funded through the appropriations process, with no level of funding specified. While this program has the potential to deliver large emissions reductions outside of the cap, this is unlikely to occur if it remains unfunded or severely under-funded. ENE recommends annual funding of \$500 million.
2. **Prioritization.** While early adopters should be eligible through the supplemental program as opposed to the offset program, they should not be as heavily prioritized to the detriment of new activities. The supplemental program should have a primary focus on small landowners who cannot participate in the offset market because of transaction costs, and on paying for new behavior that increases carbon storage on the landscape. The program also appears to prioritize easements on native prairie and grasslands that are part of a farm operation, but that should be clarified/expanded to include intact prairies and grassland which may well be more susceptible to land conversion. We support the focus on permanent conservation easements as this will likely provide the greatest carbon benefit and return on investment dollars.
3. **Timber harvest contracts and grazing contracts.** Strategies to provide payment to private parties for desired outcomes on national forests and other federal lands must be very carefully evaluated to ensure that scarce resources are not used to achieve public benefit that could easily be achieved directly through policy and regulation. The Forest Service is just beginning to consider public policies around carbon management based on an Executive Order, draft guidance from CEQ, and the upcoming planning rule revision process. Similarly, the Bureau of Land Management is beginning to consider climate change and carbon management strategies based on Secretarial Order 3289 and draft guidance from CEQ. Inserting a loosely defined carbon incentive program at this juncture could inadvertently undermine new agency carbon policy by establishing the presumption that timber and grazing contractees will receive carbon payments in the future as opposed to revised contract terms under new public policy. We recommend that the Carbon Conservation Program predominantly focus on private forestland and agricultural land owners, where the majority of carbon benefits can be obtained and where there is an escalating rate of land conversion. If public land provisions remain in the program, we recommend that funding purposes be carefully defined and that no more than 10 percent of the Carbon Conservation Program funds be used for activities on federal lands.

For Further Information:

Derek Murrow, Energy & Climate Policy Director, (203) 285-1946, dmurrow@env-ne.org

Ellen Hawes, Forest Policy Analyst, (207) 778-6260, ehawes@env-ne.org

Peter Shattuck, Carbon Markets Policy Analyst, (617) 742-0064 x103, pshattuck@env-ne.org



8 Summer Street, PO Box 583 Rockport, ME 04856 (207) 236-6470 admin@env-ne.org
Portland, ME / Boston, MA / Providence, RI / Hartford, CT /
Charlottetown, PEI, Canada | www.env-ne.org | Daniel L. Sosland, Executive Director

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.