



## OFFSETS

### **Nicholas Institute Discussion Memo on H.R. 2454, American Clean Energy and Security Act of 2009**

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**What it does?** In cap-and-trade systems, uncapped or unregulated sectors can reduce greenhouse gas emissions or increase carbon sequestration. Voluntary greenhouse gas emission reductions or sequestered carbon by uncapped entities can then be translated into a commodity (i.e., a carbon offset) which capped entities can then purchase to satisfy their emission compliance requirements if making internal reductions is too difficult and/or cost-prohibitive

**Why it is necessary?** Generally speaking, the inclusion of offsets in a cap and trade system can allow greater emission reductions at the same cost. They provide mitigation in sectors outside the cap, reduce the overall cost of compliance, engage additional constituencies, and provide additional environmental co-benefits (e.g., habitat and water quality improvement). In the particular case of the Waxman-Markey discussion draft, EPA analysis suggests that including offsets, particularly international offsets, can cutting the allowance price by half.

#### **Waxman-Markey particulars**

The existing draft sets high limits with the total contribution of offsets set at 2 billion metric tons, annually. This amount is split evenly between 1 billion for domestic offsets and 1 billion for international with the limit on international offsets increasing up to 1.5 billion metric tons if the supply of domestic offsets is insufficient. Domestic offsets will be credited 1:1; international offsets will be credited 1:1 at first with this shifting to 4:5 (a 20% discount) after 5 years. The provision includes a range of international offsets options providing flexibility. These move from project based toward sectoral based approaches that help address integrity and engage developing countries in meaningful reductions. The bill includes a provision setting aside 5% of allowances to help support the development and integrity of international reduced deforestation programs.<sup>1</sup>

#### **Key Strengths**

- The offset provisions generate significant cost-containment. EPA analysis suggests that the 1 billion metric ton volume limits will not restrict the supply of domestic offsets, but is potentially limiting for international which can generate a much larger supply;

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<sup>1</sup> Lydia Olander and Brian Murray have further notes on the reduced emissions from deforestation and supplemental section of the bill which we would be happy to share or discuss.

- The domestic offsets program is set up to be stringent but efficient. It is more stringent than similar provisions in previous legislation. Undue political complexity is avoided by deferring decisions of project eligibility to the Administrator, an advisory board, and USDA;
- Program contains a fairly strong review provision to insure updating and improvement of methods over time;
- The 1.25 compliance ratio on international offsets after 5 years will generate 20% extra mitigation that could be considered a buffer against uncertainty.
- The international sectoral approach helps reduce leakage and address competitiveness concerns and the international reduced deforestation provision brings in a critical source of global emissions. These provisions also move countries toward national accounting with the capacity and institutions necessary for a cap in the future. This also helps alignment with approaches under discussion for the UNFCCC.
- The 5% set aside of allowances is a significant commitment to advancing reduced deforestation.
- Significant biodiversity and native species use and human rights/forest people safeguards are required.

### **Possible shortcomings**

- The 1.25 compliance ratio for international offsets is potentially a blunt tool that operates in addition to other discounts and adjustments, or requirements for national targets or baselines. It might be preferable to use a discounted compliance ratio as an incentive for higher standards or tighter targets. For example, if a country agrees to more stringent standards or a tighter target the compliance ratio discount is removed;
- Early action program could exclude offsets operating under existing non-government affiliated registries or markets;
- The program does not require the U.S. to use a national level true up to provide a check on how project level activities are adding up to national level performance for domestic offsets. (A national true-up can help provide information to adjust the project methodologies and perhaps even correct for under or over crediting.) However the bill does require a national level true-up from developing countries that want to participate in international reduced emissions from deforestation programs (national baselines);
- While we understand from conversations that the intent was to leave the door open to broader land use activities (sequestration as well as avoided emissions), it is somewhat unclear how non-forested systems and sequestration out of afforestation and reforestation are included.<sup>2</sup> Eventually, it will be important to achieve full land use accounting to avoid leakage to other land cover types characterized by significant GHG fluxes;

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<sup>2</sup> Afforestation and reforestation are included under the UNFCCC Clean Development Mechanism, which has been a very limited program (only 3 projects now in place).

- The strength of international human rights/forest people safeguards requirements for the reduced deforestation program will depend on how negotiated agreements assess and enforce results (e.g., tying participation in the program and issuance of credits to successful demonstration of results).

### Summary

Generally speaking, the Waxman-Markey offset provisions are on the stringent side – more stringent than many recent proposals. The bill is also less prescriptive than many other climate bills, placing most of the responsibility for program development and operation on EPA, USDA, and a special advisory board. Restrictions on the amount of domestic offsets that are eligible for compliance are not limiting, but restrictions on international offsets are. International offset provisions are designed to move developing countries toward meaningful commitments. Offsets play a critical cost containment role in this bill.

**Table 1. Offset program particulars**

Parameter	Values
<b>Percentage of Compliance Obligation</b>	Starts at around 30% increasing up to over 60% of a covered entity’s compliance obligation.
<b>Total Allowable Contribution</b>	1 billion metric tons, each, for domestic and international offsets, totaling 2 billion metric tons annually. The allowable contribution of international offsets may be increased to 1.5 billion metric tons if supply of domestic offsets is insufficient.
<b>Crediting Ratio</b>	Domestic offsets receive full credit (1:1); international offsets are credited at 1:1 for the first 5 years, then shift to a 1.25 compliance ratio (20% discount).
<b>Domestic Offsets</b>	<p>The domestic offsets program is set up to be stringent but efficient.</p> <p>No specific project activities are called out for eligibility, avoiding political complexity. While eligibility details are left to the Administrator, an advisory board, and USDA to figure out, specific criteria and requirements for integrity of offsets are laid out, including:</p> <ul style="list-style-type: none"> <li>• <b>Additionality:</b> legal, post-2009 start, and exceeds baseline</li> <li>• <b>Baseline:</b> language suggests use of a performance standards approach based on a conservative estimate of business-as-usual practices</li> <li>• <b>Leakage:</b> requires development of standardized methodology to account for and mitigate leakage</li> <li>• <b>Uncertainty:</b> requires standardized methodology to determine and discount for uncertainty pertaining to GHG reductions/sequestration</li> <li>• <b>Permanence:</b> requires reporting and compensation through either a buffer set aside or insurance requirements</li> <li>• <b>Early actors:</b> allowed if projects meet standards that are established by state or regional law using consultative methodology process, verified, and in a government-recognized registry, or of comparable stringency. <ul style="list-style-type: none"> <li>○ Eligible for forward crediting after 2001 if meet the above</li> <li>○ Eligible for full credit between 2009 and cap (or 3 years) if meet the above</li> </ul> </li> </ul>

<p><b>International Offsets</b></p>	<p>International offsets program has a number of different pieces that can align with UNFCCC discussions (e.g., sectoral approaches and national accounting for RED). Specific criteria for international offsets include:</p> <p>Participating countries must be party to bilateral or multilateral agreement and a developing country;</p> <p><b>Sectoral:</b> Countries above some threshold of production in selected sectors are required to use sectoral approach in that sector (developing countries can voluntarily take on a sectoral target so they can sell offsets from that sector).</p> <p><b>Internationally sanctioned:</b> Allows only credits issued by international body (currently limited to UNFCCC/CDM).</p> <p><b>Deforestation:</b> Reduced emissions from deforestation program is fairly stringent, requiring a national baseline and trajectory to zero net deforestation in 20 years. Subnational projects allowed if they take on regional baselines and trajectories and align with national plans. Project level activities allowed for countries that account for less than 1% of global GHG emissions and less than 3% of land use emissions and are making good faith effort at national planning.</p> <p>Initially, only reduced emissions from deforestation are included, but the Administrator can expand scope to degradation and other forested land types</p>
<p><b>Supplemental (set-aside 5%)</b></p>	<p>5% of allowances allocated</p> <p>Expected to achieve an additional 10% of additional reductions in GHGs</p> <p>Mix of purposes and activities – addressing leakage/stock country issues; building capacity, subnational activities, enforcement of conservation, combating illegal logging, incentives for policy reforms</p> <p>Registry of supplemental emission reductions</p> <p>Funding only available to a country for 5 yrs unless making significant progress</p> <p>Has review and revision process</p> <p>(Unclear how this works with the Deforestation offsets program and how all suggested purposes will be achieved given the listed requirements<sup>3</sup>)</p>

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