

Senate Tax Credit Intended To Show Viability Of CCS Technology

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An amendment to the Senate's version of economic stimulus legislation that would grant a tax credit for carbon and sequestration (CCS) could answer lingering questions about the technology's effectiveness, because it would require oil companies to demonstrate an ability to permanently store carbon dioxide (CO₂) used for enhanced oil or natural gas recovery in order to qualify for the tax break. The proposal from Sen. Thomas Carper (D-DE) strikes at the core of a debate over whether the technology can be used for permanent disposal of CO₂, thus enabling energy companies to meet emerging CO₂ controls.

Energy companies have long used CO₂ injection to enhance oil and natural gas recovery, but Carper's proposal would create the first federal tax incentive tied to a required demonstration that CO₂ would remain permanently stored underground when used to increase the yield from oil and natural gas fields, according to an environmentalist familiar with the measure. While the amendment would not force companies to transform oilfield injection projects to demonstrate permanent sequestration, advocates hope its tax benefits would spur such a move.

Most CO₂ injected for enhanced recovery projects will naturally remain sequestered, but Carper's amendment would require companies to monitor closed wells to ensure that injected CO₂ does not leak; similar monitoring incentives have been tried in states like Texas and internationally, the environmentalist says. The technology to conduct such monitoring exists, but it is not widely deployed. "What's needed is to develop protocols to guide people in the use of those technologies and to lower the overall costs," the environmentalist says.

The amendment would modify the conditions of the CCS credit that was created as part of last year's bank bailout. Companies can claim a \$20-per-metric-ton tax credit for carbon emissions that are captured and permanently stored and a \$10-per-metric-ton credit for captured CO₂ that is used for "enhanced oil recovery." Under current law, companies that use CO₂ to recover more oil or natural gas are not required to ensure its permanent storage under ground; Carper's amendment would add that requirement. "We should be sure we're getting what we pay for," a Senate source says, explaining the senator's view that government tax breaks should only apply to permanent sequestration projects.

Senate Committee Markup

The amendment was added to the Senate's \$887 billion package of spending increases and tax cuts during a Finance Committee markup Jan. 27. The full Senate is expected to vote on the stimulus package next week; the House passed its version of the stimulus package Jan. 28 without an amendment similar to Carper's.

Carper's amendment would require the Treasury Department to promulgate rules governing the tax credit program, in consultation with EPA, the Department of Energy and the Interior Department. The environmentalist says those rules could serve as the basis for a mandatory sequestration provision that may be included in a cap-and-trade bill. Companies would be required to monitor CO₂-injected wells to prevent and correct problems that can accompany such projects like leakage, damage to geologic formations or over-filled reservoirs; specific monitoring mechanisms will be designed and implemented on a case-by-case basis. "If those steps are taken, there's every reason to believe that sequestration in oil fields will be safe and effective," the environmentalist says.

Companies that participate in oil field injection projects support Carper's amendment, sources say, believing it will clarify the requirements of future efforts to pursue CCS through oil field injection. Advocates for the amendment believe it fits within the economic stimulus bill's goals by creating jobs monitoring the injection sites and developing the necessary technology.

The amendment does not include liability relief for companies pursuing enhanced-recovery CCS projects, and the environmentalist says it's not clear that such relief would be necessary, citing similar projects that sequester underground hazardous waste or natural gas—both of which are potentially more dangerous than CO₂—without liability relief for the companies involved.