



UNITED Carbon Sequestration Council STATES

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Sequestration News

There are some very interesting events to note regarding CCS, including Dr. Chu's support of CCS in his confirmation hearing, significant funds for CCS proposed in the Stimulus Bill, a Climate "Blueprint" by the U.S. Climate Partnership (USCAP) group, and criticism of EPA's finding that it is not ready to regulate CO₂ under NSR permits.

Dr. Steven Chu Supports CCS in Confirmation Hearings

Dr. Steven Chu, President Obama's nominee for the cabinet position of Secretary of Energy, supported CCS and clean coal technology in his January 13th confirmation testimony before the Senate Committee on Energy and Natural Resources. In his written statement before the Committee he indicated that *"President Obama's plan builds on the good work of this committee in recent years: a greater commitment to wind, solar, geothermal, and other renewable energy sources; aggressive efforts to increase energy efficiency of our appliances and buildings; more fuel efficient cars and trucks, and a push to develop plug-in hybrids; greater investment in technology to capture and store carbon emissions from coal-fired power plants; a continued commitment to nuclear power and a long-term plan for waste management and disposal; responsible development of domestic oil and natural gas; increased commitment to research and development of new energy technologies; a smarter, more robust transmission and distribution system; and a cap-and-trade system to reduce our greenhouse gas emissions."* Also, a January 15th New York Times article cites assurances from President Obama's management team (including Dr. Chu) that coal is "a vital resource".

Stimulus Bill

It's a new year and a new Congress. There is strong optimism for near term enactment of a Stimulus Bill to inject money into the flagging economy, including funds directed at energy issues. Less optimism is associated with climate legislation, perhaps due to its cost and current economic conditions.

House Democrats have provided details for their \$825B stimulus proposal with tax provisions (\$275B) under the House Ways & Means Committee and appropriations (\$550B) under the Appropriations Committee. Markup is supposed to occur this week, and Democrats have indicated that they expect to pass a bill by February 13th. Most of the energy-related money goes to renewable energy, energy efficiency, and power transmission systems, but \$2.4B is designated for CCS demonstration projects (through EISA-2007, Section 702 – this appears to route the funds to DOE/FE R&D programs). A summary of the tax provisions (without cost estimates) is available on the House Ways and Means Committee’s website: <http://waysandmeans.house.gov/news.asp?formmode=release&id=846> . A copy of the appropriations bill is available at <http://appropriations.house.gov/> .

While these investments are being planned, the Senate Budget Committee posted a CBO 7-slide “Ten Year Budget Outlook” presentation on its website. The sobering slides concluded with a former GAO Comptroller’s statement that “we’re the largest debtor nation in the history of mankind, and it’s getting worse, not better.” The presentation and CBO’s more detailed, and more depressing, outlook are both available at <http://budget.senate.gov/democratic/hearingstate.html> .

Climate Related Debate

The U.S. Climate Action Partnership (USCAP) released a “Blueprint” report on actions that they favor to address climate change. USCAP’s plan is important because the organization includes major energy and environmental stakeholders (Duke, BP, Rio Tinto, Shell, ConocoPhillips, Siemens, GE, NRDC, Pew Center, WRI, and EDF). They favor a C&T regulatory program, “*with cost containment measures and complimentary policies for technology ... development.*” The cost containment measures appear to be the environmentally favored approach of borrowing from a set-aside pool of allowances, rather than an allowance price cap, or “safety valve.” The Blueprint contains US emission reduction targets and timetables, including a reduction to 58% of 2005 emission tons by 2030, and 20% of 2005 tons by 2050. They favor placing limits on emission offset credits. CO₂ emission standards are recommended for any plant permitted after January 2015, with coal plants permitted in the interim to face retrofit requirements. This program represents a very stringent approach to reducing U.S. GHG emissions. The Blueprint report and a Summary are available at: <http://www.us-cap.org/blueprint/overview.asp> . Additionally, USCAP was the focus of a hearing by Representative Waxman’s E&C Committee on January 15th. Statements by 13 different representatives of USCAP members are available on the Committee website.

EPA and CCS

On December 18th, in the wake of the EAB decision on Deseret Power (directing EPA Region 8 to reconsider its logic for determining that CO₂ is not a “regulated NSR pollutant,” resulting in the Region not requiring CO₂ emission limits in the coal-fired power plant’s permit), EPA Administrator Johnson issued a memo to EPA regional offices declaring that CO₂ is not a “*regulated NSR pollutant.*” The Administrator expanded the finding to conclude also that new source review requirements would not apply to CO₂ emissions even if EPA made a positive “endangerment” finding. Four days later, Senator

Boxer requested that the Department of Justice *“intervene immediately with EPA Administrator Stephen Johnson to ensure that he withdraws his blatantly illegal memo...”* Two weeks later, a large group of environmental organizations submitted a formal 26 page *“Petition for Reconsideration”* to EPA, asking the Administrator to reconsider his determination, which they equated to a *“final rule.”* On January 15th, some of those same groups (Sierra Club, NRDC, and EDF) filed suit in the U.S. Court of Appeals for the DC Circuit to reverse Johnson’s December 18th findings.

Federal Climate Legislation Commentary

From the Senate side, Senator Murkowski (R-AL) was reported by *Greenwire* (January 13th) to predict quick action on energy legislation, but thought that it would be *“really ambitious”* to pass climate legislation during 2009.

In a December 27 op-ed in the *New York Times*, Rep. Inglis (R-SC) proposed a carbon tax *“accompanied by equal, pro-growth tax cuts,”* as a better approach to GCC than politically popular cap and trade bills. Cap and trade is politically popular because there is concern that a carbon tax would be perceived by the public simply as a tax increase, and not as an environmental initiative. Exxon CEO Tillerson recently endorsed a carbon tax as preferable to a cap and trade approach.

State of Illinois Climate Legislation

The state of Illinois has enacted Public Act 095-1027, a law with far-reaching implications for coal and renewable energy use in the State of Illinois. The law requires new coal-fired power plants in that state to capture a minimum of 50% of uncontrolled CO₂ emissions in order to qualify as *“clean coal facilities.”* The minimum jumps to 70% for units scheduled to commence operation after 2015, and 90% if scheduled to commence operation after 2017. A *“clean coal portfolio standard”* requires purchase of some percent of each utility’s power from a *“clean coal facility”* (meaning one with CCS) – this appears to mandate power purchase agreements from the proposed Tenaska Taylorsville IGCC facility. It is not clear from a simple reading whether the law actually prohibits the construction of new coal plants without CCS. The state’s goal is that the CCP will be 25% by 2025, although there is a cost cap implying that early units will likely involve EOR. New *“clean coal facilities”* are also required to burn bituminous coal with over 1.7 #S/mmBtu heat content. Coal-to-SNG facilities are required to capture 90% of uncontrolled CO₂ emissions, and use high sulfur bituminous coal as feedstock. In addition, the law authorizes the State’s Resource Development Bureau to *“develop, finance, construct, or operate electric generation and co-generation facilities that use indigenous coal or renewable resources, or both, finance with bonds issued by the Authority on behalf of the Agency. Any such facility that uses coal must be a clean coal facility [i.e., sequester CO₂] and must be constructed in a location suitable for carbon sequestration. The Agency may also develop, finance, construct, or operate a carbon sequestration facility.”* The law also authorizes *“any gas utility to enter into a contract for up to 20 years of supply with any company for the purchase of SNG produced from coal ... if the company has commenced construction of a coal gasification facility by July 1, 2010.”* The gas price is declared *“reasonable and prudent”* if the facility meets certain operating and cost criteria. Reasonably and prudently incurred

expenses for “clean coal facilities” are declared to “serve the public interest.” The 115 page law also has provisions for a renewable portfolio standard, and for a program to reduce electricity peak demand.

The EU & CCS

Greenwire reports (January 16th) that a Wegener Institute (Germany) ocean fertilization experiment about to begin in the Southern Ocean, was suspended by the German science ministry due to objections from the German environment ministry. The environment ministry expressed concerns regarding uncertain environmental effects from the application of 20 tons of iron sulfate.

Climate Related Hearings & Briefings

Solar woes: Several recent news articles have focused on the fact that solar cells use toxic materials that are not easily recycled. An advocacy group, the Silicon Valley Toxics Coalition, published a report stating its concerns and recommendations, [Toward a Just and Sustainable Solar Energy Industry](http://www.etoxics.org/site/PageServer).
<http://www.etoxics.org/site/PageServer>

CCS Related Reports

Democratic Staff for the Senate E&PW Committee have issued a report, *Report on the Tools Available under the Clean Air Act to Immediately Reduce Global Warming Pollution*. They favor approving California’s waiver application (to allow California regulation of motor vehicle GHG emissions); issuing national GHG emission standards for vehicles; lowering the carbon content of fuels (e.g., a higher ethanol content requirement on gasoline); and setting NSPS for GHGs from new and existing stationary sources.

On January 9th, a consortium led by Carnegie Mellon University, and funded by the Doris Duke Charitable Foundation, issued a report, *Carbon Capture and Sequestration: Framing the Issues for Regulation – an Interim Report from the CCSReg Project*. The report concludes that CCS is essential to achievement of a 50-80% reduction in CO₂ emissions, but that a regulatory framework and CO₂ pipeline infrastructure are needed to facilitate commercial-scale projects. They proposed a user-based fund to address long-term management of injected CO₂, and a 2-stage regulatory approach in which rules for CCS are deferred until there is experience with 10-15 commercial scale projects. The report is available at:
http://www.ccsreg.org/working_papers.html

Harvard’s Kennedy School of Government has published a 46 page paper, *Advancing Carbon Sequestration in an Uncertain Legal and Regulatory Framework*, which addresses legal issues arising in the DOE RCSPP Phase II projects. The paper proposes policies to overcome these problems for subsequent research-scale CO₂ storage projects.
http://belfercenter.ksg.harvard.edu/publication/18769/advancing_carbon_sequestration_research_in_an_uncertain_legal_and_regulatory_environment.html?breadcrumb=%2Ftopic%2F37%2Fenvironment_and_climate_change

The Congressional Research Service has published two climate related reports: *Climate Change: Action by States to Address GHG Emissions*, December 4, 2008; and *Carbon Control in the U.S. Electricity Sector: Key Implementation Uncertainties*, December 23, 2008.



The U.S. Carbon Sequestration Council (www.uscsc.org) is a not-for-profit, 501(c)(3), organization established as an authoritative source of information to inform and to educate on all matters pertaining to carbon sequestration.