



UNITED Carbon Sequestration Council STATES

July 19, 2009

Sequestration News

The big news is that the Waxman Climate Bill (H.R. 2454) was passed by the House on June 26. The bill contains a Renewable Electricity Standard (RES), an economy-wide GHG cap & trade emissions control program for climate change mitigation, and significant financial incentives for advanced low-carbon technologies, including coal with CCS. The Senate has already started holding hearings to help develop its version of an energy & climate bill. Markup is expected to occur within jurisdictional committees in September. Key issues include impacts on agriculture, international trade, and distribution of allowances.

Waxman-Markey (W-M) Climate Bill

On June 26, the House passed **H.R. 2454**, the Waxman-Markey climate bill. Bill provisions related to coal include:

- **Section 101**, a Renewable Electricity Standard (RES), which may leave little room for new coal units which might demonstrate CCS technology
- **Sections 111 and 113**, which provide for studies to address some of the regulatory issues associated with CCS technology
- **Section 112**, which directs EPA to adopt standards for CO₂ storage projects, beyond those standards already under the EPA Underground Injection Control (UIC) program
- **Section 114**, which provides for \$10 billion to be collected via a “line charge” from local electricity distribution companies, and used by a corporation created under EPRI to select and fund CCS demonstration projects
- **Section 115**, which provides allowances to certain CCS projects from allocations established under Sec. 321 of the bill [new Clean Air Act sec. 782(f)]. Depending on allowance values, these resources could reach a value of \$200 billion. The bill lacks details on exactly how the allowances would be awarded at a project level, but states a goal of 60 GW of power plant capacity, and 12 GW-equivalent of industrial CCS capacity.
- **Section 116**, which establishes CO₂ performance standards for coal based power plants permitted after January 1, 2009

- **Sections 711, 721, and 722**, which create a cap & trade program to reduce GHG emissions by 83% by 2050`
- **Section 321**, which provides for a portion of emission allowances to be set aside for use as incentives for various programs, including deployment of CCS technology.

CO2 Cap & Trade Analyses

The National Commission on Energy Policy published an 11page paper on the issue of “cost containment” in climate legislation. Environmentalists (and HR 2454) tend to approach this issue from the perspective of assuring that markets are working properly (via an “allowance reserve”), whereas industry tends to approach it from the perspective of ensuring that mitigation costs do not exceed a specific value (similar to Senator Bingaman’s “safety valve” provision in early climate legislation). In an ironic twist, some parties now view the issue as a mechanism to ensure that compliance prices do not drift too low. The report concludes, “A simple price cap that is paired with a minimum price floor and that escalates in a pre-determined manner over time still offers, in our view, the most straightforward and effective response to the cost concerns ...” However, the conclusions continue that an allowance reserve (which is primarily a hedge against volatility) can provide most of the benefits of a price cap. This effectively places NCEP in support of the approach used in HR 2454.

<http://www.energycommission.org/ht/a/GetDocumentAction/i/10972>

On July 15, Synapse Energy Economics, Inc., released a report, Productive and Unproductive Costs of CO₂ Cap-and-Trade. The 79 page report was prepared for several public power associations and concludes that certain “free” allowance distributions increase the cost of C&T legislation, such as distribution to merchant power generators. <http://www.synapse-energy.com/>

A report issued by the Climate Group suggests that policies other than cap-and-trade can best meet 2020 emission goals. The group, a non-profit organization which liaises on climate policy between business and government, said savings of 19 billion tons of carbon dioxide equivalent (a year could largely be made by scaling up seven policies. The policies include:

- Policies to reduce emissions from deforestation and degradation (9 billion tons);
- Renewable energy standards, such as feed-in tariffs (2.1 billion tons);
- Industry efficiency (2.4 billion tons);
- Building codes- to improve efficiency in new and existing buildings (1.3 billion tons);
- Vehicle efficiency standards (400 million tons);
- Fuel carbon content standards (300 million tons); and
- Appliance standards- for white goods and electronics (300 million tons).

The report also advocated continued development of low carbon technologies such as CCS.

http://www.theclimategroup.org/assets/resources/Technology_for_a_low_carbon_future_full_report.pdf

CCS Related Senate Activity

With the House passage of H.R.2454, the focus now shifts to the Senate, where mixed messages have emerged over the past two weeks with regard to a **Senate Climate Bill**. Initial reports suggested there may be fast action, with major draft elements emerging from Senate Environment & Public Works

Chairman Boxer within two weeks, and action by 6 relevant jurisdictional committees to be completed by mid-September. However, recent announcements indicate that markups will be delayed until September, although Senator Reid has still requested that such work be completed by the end of September. Key issues will likely be similar to those cited in the House bill, including the treatment of emissions offsets, distribution of allowances, tariffs on goods from nations not imposing similar provisions on their industries, and merger of climate issues with Senator Bingaman's energy bill (which included a Renewable Energy Standard).

EEDaily (July 14) reported that **Senator Bingaman** favors changes in the 2007 Renewable Fuels Standard (RFS) which targets 36 billion gallons of liquid fuels by 2022 (not to be confused with the Renewable Electricity Standard proposed in HR 2454). Senator Bingaman apparently wants to expand eligibility to include algae based fuels (and perhaps in other ways as well), and implied that amendments might be offered to the Senate's climate bill when it reaches the Senate floor. Senator Bingaman also appears to support efforts to preclude EPA from considering land use issues (for the next 6 years) when evaluating whether biofuels actually reduce net greenhouse gas emissions, a position advanced by agricultural interests associated with corn-based ethanol production.

A broad slate of **climate-related hearings** is underway in the Senate. The Senate Environment & Public Works Committee held a hearing on agricultural benefits of climate legislation (July 14), transportation issues (also July 14), and trade competition issues (July 16). Cabinet Secretaries from Energy, Agriculture, Interior, and EPA Administrator Jackson testified on climate change legislative tools on July 7, along with Dow Chemical and NRDC.

FY10 appropriations for DOE Fossil Energy R&D are under consideration with the Senate Appropriations Committee. The Committee reported out a \$27 billion appropriation bill (which included DOE appropriations) to the Senate Floor. For Fossil Energy RD&D, the Senate bill would provide about \$700 million, but the Committee deleted funds for the sequestration energy hub requested by DOE.

Chemical giant BASF told Congress it will lay off workers if it has to pay for carbon permits. Testifying recently at a **subcommittee hearing of the Senate Foreign Relations Committee**, Wolfgang Weber, the head of climate policy for BASF, said the only reason that the company has not closed facilities is because, so far, it has been given free carbon dioxide emission permits in the EU ETS. BASF has approximately 97,000 employees and operates 330 facilities on five continents. It employs about 15,000 people in the U.S. The Senate hearing aimed to get a better idea of how the EU ETS impacts industries. The panel witnesses all agreed that it was too soon to tell whether European emissions trading would force its manufacturers overseas. The test for European companies will come in 2013, when manufacturers will have to start to pay for some permits to cover their emissions. (*Point Carbon*, July 9)

EPA and CCS

The D.C. Circuit Court of Appeals issued a decision on July 10 (NRDC v EPA, Case No. 06-1045) which could impact efforts to control CO₂ under current law. The case related to NO_x emissions control to meet urban ozone standards. The court held, among other things, that the trading system used under the so-called "NO_x SIP Call" did not ensure that each state's statutory obligations would be met. EPA must now develop and issue new rules.

On July 7, the Georgia Court of Appeals reversed a Georgia Superior Court decision which had required the proposed Longleaf coal-fired power plant to include a limit on CO₂ emissions in its PSD (air) permit, issued by the State.

On July 8, EPA granted California's request for a waiver from Clean Air Act limitation on state motor vehicle emission standards. This gives California the right to adopt GHG emission limits on new motor vehicles. [74FR32744, July 8, 2009]

On July 1, EPA Region 7 wrote to the Kansas Department of Health and Environment suggesting further review of the Sunflower power plant permit. Among other things, EPA stated that "Sunflower should consider the option of employing IGCC technology, and other higher efficiency designs for the permit record." Although EPA did not make this recommendation a "requirement", the Region's position marks a significant shift from longstanding EPA policy that IGCC constitutes a "redefinition" of the source and that consideration of such redefined designs is not a federal permitting requirement.

EPA's Science Advisory Board prepared a 59 page set of draft comments (dated July 9) on EPA's draft Guidelines for Preparing Economic Analyses (2008). Like the draft Guidelines, the draft comments on the draft Guidelines provide a detailed discussion of the exciting topic of "discount rates." Discount rates are a crucial issue in analysis of climate change policy, because traditional discount rate approaches tend to place a very low value on climate impacts that might occur decades from now, while placing a high value on mitigation efforts taken today. Studies such as the "Stern Report" justify an aggressive climate policy by applying innovative approaches to determining appropriate discount factors. The comments also address other controversial environmental assessment issues, such as use of "willingness to pay" approaches, which tend to yield relatively high values for protecting ecosystems, as compared to approaches based on the commercial value of such ecosystems. The draft appears to be scheduled for discussion by the SAB on August 6.

California & CCS

Two Cal State business Professors submitted a report evaluating the California climate rules (Cost of AB32 on California Small Businesses – Summary Report of Findings). The assessment used the IMPLAN model, a commercial input-output model frequently used to evaluate the impacts of policies on economic activity, including direct and indirect (or induced) impacts. The report noted that the self-assessment of the legislation by the California Air Resources Board (ARB) showed a cost of \$25 billion. The ARB analysis has been criticized by some as being designed to yield a misleadingly low number. The Cost of AB32 Report cited 7 areas of impacts omitted or inadequately addressed by ARB. The study concluded that the cost of AB32 could best be evaluated with a scenario approach, and determined a range of impacts of \$71 – 183 billion, somewhat higher than ARB's estimate. The estimate of impacts on California employment ranged from 0.4 – 1.1 million jobs. <http://www.cdtoa.org/industry/carb/258-carb-news/788-two-csus-professors-release-scathing-report-on-the-costs-of-ab-32->

General CCS News Items

A July 1st DOE Techline announced that two DOE CCS demonstration projects were selected under the DOE Clean Coal Power Initiative (CCPI-3). According to the Techline, the selected proposals will employ different technological concepts to achieve a goal of at least 90 percent CO₂ capture efficiency. The Techline described the selected project as follows:

- **Basin Electric Power Cooperative** (\$100 million)
Beulah, N.D.
Post Combustion CO₂ Capture Project - Basin Electric Power Cooperative will partner with Powerspan and Burns & McDonnell to demonstrate the removal of CO₂ from the flue gas of a

lignite-based boiler by adding CO₂ capture and sequestration (CCS) to Basin Electric's existing Antelope Valley Station, located near Beulah, N.D. Powerspan's ECO2[®] ammonia-based technology will be used to capture CO₂ on a 120-megawatt electric-equivalent gas stream from the 450 megawatt Antelope Valley Station Unit 1. The net result will be 90 percent removal of CO₂ from the treated flue gas, yielding 3,000 short tons per day (1,000,000 tons per year) of pipeline-quality CO₂. The ammonia based SO₂ scrubbing system will also produce a liquid stream of ammonium sulfate that will be processed into a fertilizer by-product.

➤ **Hydrogen Energy International LLC** (\$308 million)

Kern County, California

Hydrogen Energy California Project: Commercial Demonstration of Advanced IGCC with Full Carbon Capture - Hydrogen Energy International LLC, a joint venture owned by BP Alternative Energy and Rio Tinto, will design, construct, and operate an integrated gasification combined cycle power plant that will take blends of coal and petroleum coke, combined with non-potable water, and convert them into hydrogen and CO₂. The CO₂ will be separated from the hydrogen using the methanol-based Rectisol process. The hydrogen gas will be used to fuel a power station, and the CO₂ will be transported by pipeline to nearby oil reservoirs where it will be injected for storage and used for enhanced oil recovery. The project, which will be located in Kern County, California, will capture more than 2,000,000 tons per year of CO₂.

The June 19th issue of MIT News references a recent MIT report on CCS. According to the article, the subject report is based on the findings of a major MIT symposium on applying CCS to existing coal-fired power plants, and discusses possible next steps for moving forward with CCS. "There is no credible pathway toward prudent greenhouse gas stabilization targets without CO₂ emissions reduction from existing coal power plants. We urgently need technology options for these plants and policies that incentivize implementation," Moniz said. "We may not see a strong CO₂ price signal for many years. In the interim, we need a large, focused, federal program to develop and demonstrate commercial-scale technologies."

The *NYTimes* reported July 8, citing a report in March/April 2009 *Foreign Affairs*, that a new study has concluded that geoengineering options for limiting global warming will not protect ocean ecosystems from adverse effects. For example, systems that "screen" incoming light will not impact rising atmospheric concentrations of CO₂, which will lead to higher ocean concentrations.

<http://greeninc.blogs.nytimes.com/2009/07/08/study-geoengineering-wont-help-oceans/>

Greenwire reports (July 9) that the Intermountain Power Agency (a state/municipal cooperative in Utah) has cancelled plans to expand their existing power plant near Delta, Utah. The Agency had proposed adding a 900 MW coal-fired unit. Much of the anticipated power was intended for the California market, and California has stated that they want to be "coal-free" by 2020.

<http://www.eenews.net/Greenwire/2009/07/09/3/>

On July 13, Denbury Resources, Inc., announced that it is conducting a feasibility study for a CO₂ pipeline connecting the Midwest to Louisiana or Mississippi. The pipeline would be 500-700 miles long, cost about \$1 billion, and require 4-5 years to build. The study is scheduled to be completed this year.

<http://www.denbury.com/>

EU Countries & CCS

Plans to build a **CCS plant in Holland** have been put on hold after residents raised fears about safety. The Ministers of Environment and of Economic Affairs commissioned new research into the suitability of using an empty gas field near Rotterdam to store carbon dioxide emissions from the Perniss refinery, which is owned by Shell. The pilot CCS plant would store approximately 10 million metric tons of carbon dioxide under the town of Barendrecht. The town council is opposed to the plan, arguing the risks to locals are unclear and house prices may collapse. The potential storage site lies under a residential area of 7,600 homes. Shell may now have to shelve the pilot CCS plant, which not only had already passed an environmental and safety impact assessment, but had also been awarded government subsidy. (Point Carbon, June 29)

Nine energy firms including utility E.ON and oil major Shell are considering funding a large chunk of a proposed carbon capture project in **Rotterdam**, according to a statement by project initiator RCI on July 14. The Rotterdam Climate Initiative (RCI), a platform for local authorities, groups and companies to work together to fight climate change, has announced their intention to halve CO₂ emissions in the area by 2025 compared to 1990 levels, partly by CCS. RCI estimated that at least 1 billion euros of funding would be required from the Dutch government and the EU, but the remaining 2 billion euros would have to come from industry. He said the firms looking into costs also included Belgian electricity company Electrabel, as well as industrial gases groups Air Liquide and Air Products and Spanish energy and engineering group Abengoa. RCI aims to store 5 million tons of CO₂ per year by 2015, which it hopes to increase to 20 million tons a year by 2025. Home to Europe's biggest port, a major hub for oil, coal and biofuels, the Rotterdam area produces about 16% of the Netherlands' total CO₂ emissions, and is counting on carbon capture to meet its ambitious emissions cuts targets.

<http://www.iii.co.uk/shares/type=news&articleid=7421981&action=article>

The leadership of **German Chancellor** Angela Merkel's Christian Democrats (CDU) has agreed not to pursue a law on CO₂ storage before the federal election in September. The ruling coalition of conservatives and center-left Social Democrats has spent months arguing over rules to regulate the efforts of utilities such as E.ON, RWE and Vattenfall Europe [VATN.UL] to test and install the technology early enough for large-scale commercial use after 2020. Social Democrat Environment Minister Sigmar Gabriel urged Merkel to step in and rescue the law, noting that she had originally pressed for the law to be adopted quickly. Speedy progress of the law is needed to allow these firms to meet timetables for pilot plants ahead of full commercial production planned for 2020, and to ensure that CO₂ taken from the plants can be piped into suitable stores by that date.

<http://uk.reuters.com/article/idUKLN52389020090623?sp=true>

All of **Britain's coal-fired power stations** could be forced to close down under radical plans unveiled by the government in mid-June. The Energy and Climate Change Secretary is proposing to extend plans to force companies to install CCS technology onto new coal plants to cover a dozen existing coal plants. A spokeswoman said that no decision had yet been made. In addition, E.ON's controversial plans to build a new coal-fired station in Kingsnorth – the first in the UK for more than 20 years – are likely to be delayed by several years at least. E.ON has entered the new station into a government competition to build the first commercial-scale CCS demonstration project. DECC has now admitted that the decision to pick a winner has been delayed and will not take place until the autumn of 2010 at the earliest. It is the government's ambition to have the winning project operational in 2014. E.ON is becoming increasingly concerned about the tight schedule of four years to build its first highly efficient coal plant in the UK which is also equipped with experimental CCS technology. The delay in the competition could favor Scottish Power's entry at Longannet, which involves attaching CCS to an existing coal station. John

Sauven, executive director of Greenpeace UK, urged the government to make all existing coal plants fit CCS. <http://www.guardian.co.uk/business/2009/jun/17/coal-power-stations-face-shutdown>

The **European Commission** has estimated that up to 7 billion euros could be made available to fund CCS technology from the EU's emissions trading scheme. Meanwhile, renewable projects would get around 5 billion euros. The new entrants reserve is intended to pay for the incremental investments that utilities make in CO₂ capture facilities, or for setting up renewable energy projects that are not yet commercially viable. As the ETS puts a price on CO₂, the free allowances thus become direct subsidies to industries, provided that they share their knowledge with new businesses to get pioneering technologies off the ground on a commercial scale. The issue at stake now is ensuring that the reserve generates the maximum amount of money, and that criteria are set for determining where it is allocated.

http://www.steelguru.com/news/index/2009/07/01/MTAwNTg0/EU_mulls_EUR_7_billion_subsidies_for_carbon_capture.html

In addition, the **EU finance ministers** recently approved a program to help with economic recovery by granting financial assistance to projects in the field of energy. The program is part of the EU's economic recovery plan in response to the global financial crisis and economic downturn. Forty seven projects have been identified along with EU funding for each of them. They are to be implemented in 2009 and 2010 with a total cost of 3.98 billion euros. The list includes 18 gas infrastructure projects (funding of 1.44 billion euros), 9 electricity infrastructure projects (910 million euros), 5 offshore wind energy projects (565 million euros) and 13 CCS projects (1.05 billion euros). (*Energy Central*, July 7)

The **UK government** has today launched a three month consultation on CCS technology. The consultation follows Energy and Climate Change Secretary Ed Miliband's announcement in April that the government would not permit new coal-fired power stations without CCS technology. The document has been published alongside independent research that supports the case for the technology. According to the research by environmental consultancy AEA Group, CCS could bring up to £4 billion a year into the UK economy by 2030, and support between 30,000 and 60,000 jobs in engineering, manufacturing and procurement. The consultation details how the government plans to curb emissions of carbon from future coal-fired power stations. Under the proposals, new coal-fired power plants will not be permitted unless they demonstrate CCS on at least 300 MW of capacity from day one, with each demonstration project required to store 20 million tons of carbon dioxide over 10 to 15 years. The government said it recognizes that it needs to intervene for the demonstration projects to go ahead, so it proposes a financial incentive funded by electricity suppliers that will support up to four commercial-scale CCS demonstrations in the UK. Alongside the government's ongoing competition to build a post-combustion demonstration, up to three further projects including pre-combustion technology could be supported, the consultation continued. Further, new coal-fired power stations will be required to retrofit CCS to their full capacity within five years of the technology being proven, which the consultation estimates will happen by 2020. An independent review, potentially led by the Environment Agency, would that year report on the status of the technology. The consultation document also explores whether this requirement should apply to existing coal fired power stations. If CCS takes longer than expected to be judged proven, the government is proposing further measures to ensure emissions from coal are substantially reduced. Legislators are considering an annual cap on individual power stations' emissions, a limit on running hours or an emissions performance standard that would limit the amount of CO₂ that could be emitted per unit of electricity generated. Follow the link to the framework development for clean coal to see the series of documents available for review and comment.

<http://www.decc.gov.uk/en/content/cms/consultations/open/open.aspx>

The ADAM Project final report is available. Funded by the **European Commission** and coordinated by the Tyndall Centre for Climate Change Research in the UK, ADAM (Adaptation and Mitigation Strategies: supporting European climate policy) is an integrated research project running from 2006 to 2009. The intent of the effort was to better understand the trade-offs and conflicts that exist between adaptation and mitigation policies. ADAM will support EU policy development in the next stage of the development of the Kyoto Protocol and will inform the emergence of new adaptation strategies for Europe.
<http://www.adamproject.eu/>

China & CCS

GreenGen announced a start date for construction of a coal-based power plant in Tianjin City. Construction of the IGCC /CCS demonstration plant was expected to start on June 26, 2009. The GreenGen plant will be built in the Lingang Industrial Park of Tianjin, about 150 kilometers southeast of Beijing. The first phase of the plant is expected to commence in 2011 and will generate 250 MW of power. The project is organized into three phases, with 650 MW of additional generation to be added by 2016 <http://www.energy-business-review.com/news/greengen-to-construct-clean-coal-power-plant-in-tianjin-090618>

The Asian Development Bank (ADB) has agreed to provide \$1.25M (£767,000) of funding towards development of a road map for CCS projects in China. The Chinese government will provide a further \$30M of capital to the scheme. The effort includes formulation of policies and the legal and regulatory framework needed to support the technology. Part of the funding from ADB will go towards China's first clean coal-based power plant, which is being built in the northern city of Tianjin at a cost of \$1B. In May, China said its electricity capacity is expected to double to 1,600 GW by 2020. By that time, coal-fired plants are expected to provide between 900 and 1,000 GW of power, equal to about 65% of the nation's total power needs. <http://www.businessgreen.com/business-green/news/2245817/asian-development-bank-pledges>

China's coal consumption increased prominently in the last ten days of June thanks to increases in electricity production. Daily coal consumption by Chinese power plants had reached 1.85 million tons by late June, up about 15.6% over that in mid-May. Data from the State Grid show that China's electricity output in late-June rose 7% year on year, compared to the negative growth of 1.7% in early June compared to last year. Its electricity output grew by 3.6% on the year in June after eight-month decline since October 2008. By June 28, power plants' coal stocks had amounted to 33.44 million tons, which could only be used for 16-17 days if calculated at daily consumption of two million tons. By July 3, the international coal price had jumped from \$68.69/ton to \$73.13/ton. However, coal stocks at Chinese major ports remain high. In early July, stocks of coal at Qinhuangdao and Guangzhou totaled 6.53 million tons and 2.7 million tons, respectively. (Energy Central, July 5)

Canada & CCS

Alberta Energy is moving forward with plans for a \$2 billion CCS effort. On June 29, the agency qualified three projects as potential winners in securing provincial funding for emission reduction demonstrations. The projects included:

- EPCOR Utilities Inc. and Enbridge Inc.: Genesee IGCC carbon capture and storage plant: \$2 billion integrated gasification combined-cycle power plant adjacent to Epcor's Genesee plant plus a pipeline and storage. (Expected CO² Capture: Up to two billion tons of storage capacity.)

- Enhance Energy Inc. and Northwest Upgrading: The Carbon Trunk Line includes a bitumen gasification plant, carbon capture, and a 240 kilometer CO₂ pipeline distribution system stretching from south of Redwater to aging oilfields east of Clive. The CO₂ will be used in enhanced oil recovery. Clients include Agrium's fertilizer plant and Fairborne Energy Ltd. (Expected CO₂ Capture: One and a quarter million tons per year.)
- Shell Canada, Chevron Canada, and Marathon Oil: The Quest Project is an integrated plan capturing carbon from the Scotford oil sands upgrader at an industrial complex near Edmonton, shipping it in a 10-kilometer pipeline to a sequestration site, with possible sales of CO₂ to third parties for enhanced oil recovery. (Expected CO₂ Capture: More than 1.1 million tons a year.)

These three were chosen out of nine proposals competing for the funds. They will continue discussions with the government until the end of July to formalize letters of intent, after which details on project funding will be released. Earlier this year, Alberta said the \$2 billion in funding will be paid out by 2015, including \$800 million in the next three years. The projects are expected to be operational in less than six years. The government has budgeted up to \$100 million in the current fiscal year for engineering and design work on the successful projects.

<http://www.calgaryherald.com/business/Province+reveals+carbon+contenders/1748893/story.html>

A report, *The Canadian Oil Sands--Energy Security vs. Climate Change*, was recently released by the Centre for Geo-economics Studies at the U.S. Council on Foreign Relations. The report says that cleaning up the oil sands represents a fraction of the climate change challenge facing the U.S. and that it's critical the country look at ways to decrease its overall energy consumption to decrease emissions. The author, Michael Levi states that "obsession over the oil sands would be a dangerous distraction." The report is available at: http://www.cfr.org/publication/19345/canadian_oil_sands.html

Australia & CCS

On June 25, Australia's Senate formally delayed voting on a carbon emissions trading scheme until August, ending government hopes of passing the bills this parliamentary session. The delay, which was ultimately expected to defeat the current legislation when it comes to a vote, continues uncertainty for major greenhouse-gas polluters and for the nation's emerging carbon-trading industry, which has stalled. The government plan proposed to have a carbon trading system cover 1,000 of Australia's biggest emitters in place by July 2011. The Senate will now vote on the package of 11 bills on August 13. <http://www.forbes.com/feeds/afx/2009/06/24/afx6584200.html>

But on June 28, it was reported that the opposition was planning to reconsider the emissions trading scheme. The federal opposition appears to have had a change of heart on emissions trading, flagging that it will negotiate over a scheme this year. The opposition had said that it would not pass a scheme this year, insisting Australia wait for the U.S. to finalize its position and for UN climate talks in December. But opposition leader Malcolm Turnbull now says the opposition will be ready to present amendments to the Australian scheme in August, which appears to open the possibility of passing an amended scheme. Turnbull indicated key concerns for the opposition are that there must be more support for coal mining in the ETS, and more capacity to reward the storing of carbon in soil and trees. The opposition and Independent Senator Nick Xenophon are commissioning research from Frontier Economics on the impact of emissions trading and of alternative schemes to cut pollution. The research will be completed by August 13. <http://www2.skynews.com.au/eco/article.aspx?id=346850>

Japan & CCS

The Japan Gas Association plans to spend approximately 200 billion yen (\$2 billion U.S.D.) to commercialize technology for producing gas from coal, according to a report by the Nikkei newspaper. The plant would operate on coal imported from Australia and Indonesia to produce liquefied natural gas (LNG). Japanese imports of LNG totaled 5.27 million metric tons in April. The association has not yet selected a site but intends to have the plant in operation by 2020.

<http://www.bloomberg.com/apps/news?pid=20601101&sid=a4wpq7smTGv8>



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.