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# CALIFORNIA BECOMES FIRST STATE TO SET GREENHOUSE EMISSIONS CAPS

California is set to become the first state in the country to require greenhouse gas emissions caps, as the state legislature has passed landmark legislation (A.B. 32) that caps emissions at 1990 levels by 2020-a nearly 25 percent decrease in total emissions. Though the state's business community is decidedly split on the legislation, Gov. Arnold Schwarzenegger (R) and leading Democrats in the legislature are hailing the action as a huge boost to the economy and the environment. Schwarzenegger is expected to sign the bill into law shortly. "We can now move forward with developing a market-based system that makes California a world leader in the effort to reduce carbon emissions," Schwarzenegger said. "The success of our system will be an example for other states and nations to follow as the fight against climate change continues. AB 32 strengthens our economy, cleans our environment and once again establishes California as the leader in environmental protection." Schwarzenegger, in a statement, emphasized the flexibility of the new law. "Throughout my negotiations, my primary concern was that the Legislature passed a bill that provided the flexibility to address unforeseen circumstances," he said. "AB 32 will ensure that the state can make adjustments throughout its implementation "

### **Resource Board to Craft Regulations**

In addition to the caps, the legislation gives the California Air Resources Board control of crafting a system to reach the caps. "The Global Warming Solutions Act of 2006 takes the first bold steps needed to create the technology and regulations we need to reduce carbon emissions and slow global warming," said Assembly Speaker Fabian Nunez (D), a cosponsor of the bill with Assembly Member Fran Pavley (D). "It has taken a generation to understand that global warming is a real threat to people and our economy. It is now up to our generation to work to solve this crisis." The bill directs the Board to:

- Adopt regulations to require emissions reporting from major sources by Jan. 1, 2008;
- Consider market mechanisms as a method of reducing statewide emissions;
- Give credit for early actors and voluntary emissions reductions such as those with the California Climate Action Registry; and
- Use its full powers to enforce the greenhouse gas emission reduction regulations.

The legislation also requires a safety valve provision which allows the governor to suspend meeting regulations for up to one year in the event of an economic crisis, natural disaster or other catastrophes such as terrorist attacks.

### **Out of State Emissions Targeted**

Notably, companion legislation (SB 1368) that was also passed by the legislature sets forth an aggressive policy to deal with emissions generated from electricity production from out of the state. That bill directs that:

- New investments from any "load serving entity" for baseload generation over three years produce greenhouse gas emissions equal to or lower than a new comparative combined-cycle natural gas power plant;
- This standard will apply to all power plants in or out of California that serve the California grid;
- The California Energy Commission and the California Public Utilities Commission adopt regulations to implement and enforce this standard;
- The commissions ensure that the standards do not negatively impact the reliability of energy services in the state.

### Supporters Cite Clean Energy Investment, Jobs

The California Climate Action Registry (*see related story*) applauded the legislation, especially with regard to the

	EXCHANGEMONITOR PUBLICATIONS' Editorial Staff		
	Martin Schneider, Editor-in-Chief		Tel.: (202) 296-2814 ext. 105 schneider@exchangemonitor.com
<b>GHG Transactions &amp; Technologies</b> , published twice-monthly (24 issues/year) by <b>EXCHANGEMONITOR PUBLICATIONS</b> , INC., is devoted exclusively to covering government & industry, policies, programs, technologies & carbon credit transactions.	Michael Glenzer, Editor	NW&M Monitor	Tel.: (202) 296-2814 ext. 107 glenzer@exchangemonitor.com
	Mike Nartker, Sr. Reporter	WC Monitor UK Monitor	Tel.: (202) 296-2814 ext. 106 nartker@exchangemonitor.com
Edward L. Helminski	Penny Hitchin, Sr. Reporter	UK Monitor	Tel.: (+44) 7748 700751 hitchin.uk@exchangemonitor.com
	Alexander Duncan, Reporter	GHG Transactions	Tel.: (202) 296-2814 ext. 103 duncan@exchangemonitor.com
	Ben Moscovitch, Reporter	HD&S Monitor	Tel.: (202) 296-2814 ext. 110 moscovitch@exchangemonitor.com
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long-term requirements. "This goes beyond 2012 which is further than Kyoto has been negotiated," said Diane Wittenberg, president of the registry. "That is really important because it shows a long term commitment and you're not going to get technology change without that. It's a blend of recognition of early action with the registry, command and control, and market mechanisms. So it's that portfolio approach as well as encouraging new technologies that you really need for anything to succeed."

According to many within the state, the business community has been fairly well split on the legislation. For those who have been reducing emissions for a long time already, AB 32 was the logical next step. "We adopted the premise from the beginning that the state was going to do something on greenhouse gas emissions since it's the sixth largest economy in the world, a very robust environmental regulatory program, and it seemed to us that this was going to happen," Kent Stoddard, senior spokesman for the western region of Waste Management, told GHG. Waste Management is a member of the California Climate Action Registry and is also a founding member of the Chicago Climate Exchange. "They found all the right balance. All of us are going to have to do more to reduce and I think they gave us a pretty darn good framework to do it. We see continued investments and a nice investment climate for a lot of things the company has been working on for the last 10 to 15 years." He cited switching large portions of the fleet from diesel to natural gas as a major accomplishment.

## **PG&E On Board**

Key utility support came in the form of Pacific Gas & Electric, a major utility in the state which has long been calling for mandatory caps on greenhouse gas emissions. "We're supporting this legislation because we are convinced that climate change is an urgent problem and action is needed now. By combining market-based mechanisms and enforceable emissions reductions, this bill strikes the right balance between improving the environment and protecting the economy. PG&E believes that California's leadership on climate change will help advance federal legislation, which is urgently needed," Peter A. Darbee, CEO and President of Pacific Gas and Electric Company said in a statement.

## **Opponents Worry About Economic Burden**

Opponents of the legislation have consistently argued that it will put a large strain on the economy and reduce the state's competitive advantage. "One of the things that really concerns our industry in particular is that given the very hard caps in this legislation and the lack of any clarity on what mechanisms will be to get there, there is really only one that we know that exists today that gets us there and that is to reduce production, produce less gasoline and diesel fuel for this market," said Tupper Hall, spokesman for the Western States Petroleum Association. He said that the emissions cuts within his industry would normally lead to more natural gas combustion but given high prices of \$8.13/million BTU and the high efficiencies employed, it is not clear where those reductions will come from, leading to an unnecessary economic burden. "Because that is a significant cost in the refining process, they've already made the process as efficient as you can get it in terms of natural gas consumption," he said. "So in terms of meeting the caps imposed on this bill, there may be some people out there but refineries are typically there already so that's not a place where we think there's a lot of reductions to be had."

# 'Leakage' A Concern

Like many opponents of the Regional Greenhouse Gas Initiative have argued, many in California also argue that emissions leakage will occur under the new caps, leading to businesses leaving the state. "Being the only state to

# CORRECTION

An article in *GHG Transactions & Technologies* Special Bulletin (8/17/06) incorrectly reported portions of the offset provisions in the Regional Greenhouse Gas Initiative final Model Rule and amended Memorandum of Understanding. The following corrections have been made:

- The program begins with utilities able to meet 3.3 percent of caps through offsets;
- At \$7/ton CO<sub>2</sub>e (2005) average price over a 12month period, utilities can meet 5 percent of emissions caps through offsets and this has not changed;
- New provisions for offset projects in the rest of the United States will be at a 1:1 basis compared to RGGI credits as originally reported though this is from the beginning of the program, not at \$10/ton CO<sub>2</sub>e as reported;
- International trading is allowed at the \$10/ton CO<sub>2</sub>e trigger which is not a change from the draft rule as reported; and
- The compliance period is extended from three years to four, only a single one-year extension rather than a maximum of three one-year extensions as originally proposed.

Additionally, a draft report on leakage will be released late this year with a final report completed by late 2007. *GHG* regrets this error.■

have absolute caps on carbon emissions puts California at a competitive disadvantage. Companies could leave California, taking their jobs and greenhouse gas emissions with them – having little impact on global climate change but a severe negative impact on California's economy," said Allan Zaremberg, president and CEO of California Chamber of Commerce.

### **Uncertainty Remains About Some Provisions**

In addition to concerns over lost jobs and competitive advantage, perhaps one of the largest points of contention is the specific language stating that the California Air Resources Board "may include in the regulations adopted pursuant to Section 38562 the use of market-based compliance mechanisms to comply with the regulations." The inclusion of "may" and not a mandatory phrase such as "shall" has given some business groups a feeling of uncertainty in how to plan to reduce emissions while knowing they will be required to by law. "The issue became at the end of this discussion whether or not the Air Board would be required to develop trading, market based trading mechanisms as part of its implementation plan or whether it would simply be allowed to consider them as one of the options it has," Hall said. "Uncertainty in an area as profoundly as important as this does not produce the best investment climate and that's a big concern. It should be a big concern for anybody who is concerned about jobs and the economy."

For her part, Wittenberg believes the legislation will undoubtedly lead to a market-based mechanism and likely a cap-and-trade system on greenhouse gases. Despite the ambiguity that some have cited, she pointed to language which states, "The state board shall adopt methodologies for the quantification of voluntary greenhouse gas emission reductions. The state board shall adopt regulations to verify and enforce any voluntary greenhouse gas emission reductions that are authorized by the state board." She said of the language that, "Some people thought that meant they would take over what we do. What it really means is that the 'state board 'shall' adopt methodologies for the quantification of voluntary greenhouse gas emissions reductions' and that's offsets. That's GHG language for offsets. If you must adopt methodologies for offsets, it doesn't seem that big of a step to actually use them."

### UTILITIES GENERALLY SUPPORT FINAL RGGI RULE But Concerns Remain About Offsets Leakag

But Concerns Remain About Offsets, Leakage

Utility executives have weighed in on the Regional Greenhouse Gas Initiative (RGGI) final Model Rule, expressing overall support for the effort as a necessary major step toward a national greenhouse gas cap-and-trade program but at the same time raising concerns about several specific provisions. The concerns largely focus on three sections of the rule: a series of offset rules that are viewed as artificially constrained, a minimum 25 percent set-aside of allowances for a public benefits fund, and the critical unaddressed issue of leakage. Also a topic of debate is the need for more low-emitting natural gas—an increasingly expensive fuel source—and the increasing importance of raising efficiencies in existing plants.

Nevertheless, support for the multi-state effort to establish a cap-and-trade system on greenhouse gas emissions from fossil fuel fired power plants set to begin in 2009, remains high. "We look at RGGI as a stepping stone to a national program. That really guides all of the feedback on how RGGI is being developed and implemented as a primer and a catalyst for a national program. That is the No.1 most important thing to us," Dan Cunningham, environmental policy manager at PSEG and stakeholder representative to RGGI, told GHG. "We don't have a problem necessarily with starting with the electricity generation sector if it can serve as a catalyst to a national multi-sector program." Keyspan, another major northeast utility which has 6,500 MW of generation in RGGI, supported the overall goals of the model rule as well. "Keyspan has been a very active participant since day one. We have long felt a mandatory program economy-wide is the best way to go," said Bob Teetz, director of environmental engineering and compliance for Keyspan and their stakeholder representative to RGGI. "We are comfortable with the Model Rule at this point."

## Difficult to Plan for next 30 Years

Against the backdrop of talk over national carbon regulations and the need to plan long term, utilities see RGGI as the first major step towards that goal in an effort to force the federal government to implement a national policy."If we had a national program today, we would all know with strong well defined future goals that go out a number of years, we could understand what our business challenges and opportunities are and put together a professional business plan we could take to our shareholders and run our business," said Cunningham who emphasized that the risk normally associated with building new generation is multiplied by the current level of uncertainty. "But right now we have no idea. We have no idea what the next Administration might do as far as a national program and when you build a power plant for 30 or 40 years with a significant amount of investment, that puts a lot of risk into that planning process."

Brent Dorsey, director of corporate environmental programs at Entergy, echoed that sentiment. Entergy owns and operates four nuclear power plants with a total of 3,400 MW capacity in the region which means they will not be regulated under RGGI. However, he emphasized his company's need to get involved at an early stage in the first cap-and-trade effort in the country. "For the next 30 years, utilities have to do a complete stock turnover. Unless the marketplace gives the right signals, the wrong decisions will be made," Dorsey said. "We want the right price signals and certainty. The fact is a cap-and-trade, a market-based approach is absolutely essential. We're really excited that this is the right way to do this." Much of their 30,000 MW generation is fossil fuel-based and in the Gulf Coast region, making them particularly susceptible to more frequent stronger hurricanes and other climate change associated events.

### Offsets Artificially Constrained, Some Say

The model rule contains five offset categories which in the initial phase will be allowed to make up 3.3 percent of emissions goals for utilities. The offsets include landfill methane, SF<sub>6</sub>, terrestrial sequestration, fossil fuel end use energy efficiency, and agricultural methane capture. The offsets are governed by a set of price triggers which allow up to 10 percent of emissions through offsets but only after an extended period of time. "I just think there are constraints here that don't need to be there. Without those constraints there would be a lot more opportunities and a lot more initiative put behind the development of these offset projects," said Cunningham. He also said that it was a positive step that offsets outside of RGGI will be considered equal to those within the region. But the new provision directing that a state sign a corresponding MOU on the issue creates additional bureaucratic problems, he said.

The lone offset which was stricken from the draft model rule was fugitive natural gas emissions. "One we're disappointed in is that in the initial offset list in the draft model rule included fugitive natural gas emissions," said Teetz who noted that it is a difficult offset to quantify. "We're disappointed that was removed but are confident it will be reinstated in the future."

### Minimum 25 Percent Set-Aside to Add Risk

Utility executives also had reservations about how the minimum 25 percent set-aside of allowances for use in a strategic public benefits fund would affect the future marketplace. "If you take 25 percent of the allowances away from the regulated sources, everyone is going to be short if you accept that," Cunningham said. "No one party, no one company, no one entity generator is going to have enough allowances to be able to true-up the emissions of

carbon dioxide with allowances at the end of the year which is the way its supposed to be. If you accept that, who is going to trade with who? There is no trading." States will have the opportunity to decide how large a fund they want to create and that will be decided upon in the next state of implementation of the RGGI final Model Rule.

Teetz had a similar view and stated that the remaining allowances for utilities be given to "cleaner units rather than dirtier units." That way there would be a minimizing of risk in the marketplace though it would still be relatively high. "We would advocate that it not be more than 25 percent. Our view is that this would increase price risk in the marketplace because it adds price uncertainty to generation costs," Teetz said. "The more you allow the pool to be auctioned, it adds risk to companies who are uncertain how many credits they will need and adding any risk will drive the price higher."

### Leakage Remains an Issue

Leakage, unaddressed in the model rule, remains a critical concern for utilities moving forward. The issue of leakage stems from the concerns that regulating electricity will drive the price of power up, leading the way for cheaper and dirtier power to enter the marketplace. "We are concerned about leakage because we have clean and low emitting CO<sub>2</sub> because we use oil and natural gas so its higher priced. We're watching carefully the leakage task force closely," said Teetz, who was confident that the agencies will develop a process to minimize that. Cunningham was also concerned, stating, "From a business point of view, when you impose additional costs to a small piece of a large marketplace, the marketplace by virtue of what a marketplace is going to seek other less costly suppliers of product, of electricity to take the place of your now higher electricity."

### Natural Gas to Remain Fuel of Choice

Utilities within the region have been gradually switching to natural gas and are likely to continue to do so given the requirements for lower emissions. However, given the lack of clarity in the marketplace today, that makes those decisions increasingly difficult. "In about May 2004 we completed a 250 MW natural gas combined cycle plant, a very highly efficient ultra low  $CO_2$  emitting generation. We have similar plans like that to develop in the future but that is up in the air because there are no signings of long term contracts," said Teetz. "In the future, natural gas combined cycle is where we want to go and also to improve efficiency in existing plants."

### **Effort Expected to Evolve**

Despite all of the movement on RGGI, these executives recognize it is in an early stage and will continue to develop. Looking at the larger picture of developing a national program and the potential for RGGI to provide a framework is the real challenge. "This is a process of feeling our way along with bumps as we go through. We will check and adjust going forward," said Dorsey. "The United States will need every tool and type of generation to deal with this problem. We look at the Northeast as the focal point for leverage to get regulation for the entire country. It's not an end to itself."

# WHITE HOUSE HAS CLOSED-DOOR MEETING WITH WALL ST. ON CO<sub>2</sub> REGS

White House officials met behind closed doors with key Wall Street executives in New York City Aug. 21 to discuss the financial community's increasingly vocal calls for a nationally regulated carbon market. The meeting, which also included Senate staff and officials from the Dept. of Energy, was the first in a planned series of informal discussions, according to participants. "There was a meeting set up to meet with Goldman Sachs and other financial houses which they did and they're starting to realize the capital markets are crying for mandatory standards," Peter Fusaro of the Energy Hedge Fund Center, told GHG. "Finally they are starting to listen to what green trading is all about." In many cases, financial institutions are feeling increasingly frustrated, ready to finance new energy projects that address climate change concerns and higher energy prices, but leery of these low carbon projects because of the lack of national carbon regulations.

### White House More Open

The willingness by the Bush Administration to seek input from Wall Street is a stronger sign that there is more movement in Washington, D.C., toward a national greenhouse gas regulatory scheme. Consistently, the Administration has argued for voluntary reductions in greenhouse gases and shunned the need for mandatory cuts, citing negative economic impacts such as job loss and decreased competition with other economies. The hope among many in the financial community is that with Wall Street getting behind carbon reductions, the White House will be more receptive to the idea of a national carbon policy. "The good news is the Administration is willing to listen. They don't need to agree but at least they're listening. There's some outreach going on." said Fusaro, who helped host the Fifth Annual Green Trading Summit in April (GHG Vol 1 No. 1). "If we don't have mandatory standards, we can't bank finance hardly anything. This whole wish list of voluntary credits, it goes away in the future. It just doesn't make sense to have voluntary markets. Technology is not the solution until the feds step in."

The most important recent efforts have been made by Senate Energy and Commerce Committee Chairman Pete Domenici (R-N.M.) and Ranking Member Jeff Bingaman (D-N.M.), who held a climate change conference in April with the intent of crafting national carbon regulations. The Senators have stated they will likely introduce legislation early in the next Congress. "They know what to do, they don't know how to do it. They know what the goal is and they have to start throwing away these economic disincentive arguments that its going to hurt the U.S. economy. It's just nonsense," Fusaro said, pointing out that if utilities can withstand \$1,630 sulfur dioxide credits, they can withstand  $30/ton CO_2$  credits. "I think the opening is now while in corporate America so many companies are going green, they want to buy green power. I think this is the opportunity," he added. "I like the bipartisanship."

# CONGRESS UNLIKELY TO PASS ENERGY APPROPS BILL BEFORE RECESS

Action Greenhouse Gas Legislation to Wait Until Next Congress

With Congress set to spend just a few weeks in session prior to going back into recess in late September in preparation for the November elections, Hill staffers say it is unlikely that the Fiscal Year 2007 Energy and Water Appropriations bill will be acted upon before the fiscal year ends. Currently, the Senate version has been reported out of committee but has yet to be taken up by the full chamber, while the House passed its version in May (GHG, Vol. 1 No. 6). Action is possible, staffers say, but only if Congressional leadership decides that acting upon the bill prior to the elections is necessary, and most see such a decision as unlikely. "If leadership wants to get it done, it will get done," one Senate staffer said. "It's possible. The Senate could act early in September, we could work through conference quickly, and we could pass it either as a stand-alone bill or in an omnibus appropriations bill prior to leaving for the elections. There are a number of 'ifs' there, though."

The staffer expressed doubt that the political will to move the bill is there. "It hasn't been decided, but from what I understand the House side doesn't want it to happen until after the elections." A House staffer agreed that the likelihood of passage was low, but said the Senate was behind the delay. They still have to get their bill done. If they do it in the first week or so, we could turn around and have a bill before we leave. I just don't think the Senate has much of an appetite for that, though." Should Congress fail to pass the bill prior to adjourning, the Dept. of Energy would be funded at FY06 levels under a continuing resolution for several months, as it remains unclear whether legislators will return for a lame duck session after the elections. The Senate appropriations bill contains \$435 million in coal R&D funding, an increase of \$104.88 million over the President's request and \$48.36 million more than the House bill. Notably, the Clean Coal Power Initiative, which received a only \$4.96 million in the budget request, receives \$70 million from the Senate bill and \$36.4 million in the House bill.

### GHG legislation to remain untouched

Meanwhile, it appears any action on the wide variety of greenhouse gas-oriented bills that have been introduced over the past several months will have to wait until the next session of Congress, when the issue is expected to be given a higher profile. Pending bills include:

- "The Clean Air Planning Act" (S. 2724), a 2006 version of a 2003 bill introduced by Sens. Tom Carper (D-Del.), Lamar Alexander (R-Tenn.), and Lincoln Chafee (R-R.I.). The bill would create a new cap-and-trade CO2 program for power plants, expand on the Nox and SO2 cap-and-trade systems established by the Clean Air Act, and put a national cap on mercury but without a cap-and-trade;
- "The Global Warming Pollution Reductions Act" (S 3698), which was introduced in July by retiring Committee on Environment and Public Works ranking member Jim Jeffords (I-Vt.). Under the legislation, the United States would be required to reduce emissions to 80 percent below 1990 levels by 2050. The EPA is given discretion whether or not to implement a capand-trade system;
- "The Safe Climate Act of 2006" (HR 5642), which was introduced by longtime environmentalist Rep. Henry Waxman (D-Calif.). The bill, like the Jeffords bill, would reduce emissions to 80 percent below 1990 levels by 2050 but it differs in that this legislation would require a national cap-and-trade and the Clean Air Act be amended to include greenhouse gases; and
- "The Keep America Competitive Global Warming Policy Act" (HR 5049), which was introduced by Reps. Tom Udall (D-N.M.) and Tom Petri (R-Wisc.). The legislation includes a safety valve that caps carbon at \$25/ton.■

# COMPANY PLANS MASSIVE CO<sub>2</sub> OFFSET PROJECT WITH AG METHANE CAPTURE

Environmental Credit Corporation is planning to create 2.5 MMT  $CO_2e$  offsets that will be available on the Chicago

Climate Exchange through a new Lagoon Cover Program, a large series of agricultural methane capture projects at dairies and hog farms across the country. "There will be over 250 projects within a short period of time," Ed Heslop, CEO of Environmental Credit Corporation, told *GHG*. "Each of these projects should be in the range of 8,000 to 10,000 metric tons per project per year over a 10-year period. This doesn't work financially for ECC if we don't have volume."

### A \$25 Million Investment

ECC will invest \$25 million into the whole project with each farmer initially receiving a 15 percent share of the carbon credits sold on the Chicago Climate Exchange. ECC will own the rights to the carbon credits, the methane, and the lagoon system. Farmers will then have the option to pay the debt of investment into the project in order to get a larger percentage of the credits. At any point the farmers can purchase the system and subsequently they will receive an even larger percentage of the credits. "From day one they're making money," Heslop said of the farmers. "For a lot of these farms, it will be \$4,000 to \$6,000 per year. We tried to make this a sweet deal for the farmers."

For ECC it will take anywhere from three to six years to pay this investment off, depending on carbon prices. For example, if the price of carbon on the CCX is  $6/MT CO_2e$ or more, it could take three years, while if it is at 2.50 to  $3/MT CO_2e$ , it could take up to six years to pay the investment off. Either way, the nationwide program which Heslop described as "everywhere except Hawaii and Alaska" will be sure to make an impact in the growing offset market. "We look to agriculture as one of the leading environmental stewards and Environmental Credit Corporation is excited to be dealing with agriculture and addressing the issue of climate change," Heslop said. This deal follows a 1 MMT CO<sub>2</sub>e over 10 years deal they inked in June between a handful of Indiana farms using GHD digesters (*GHG*, Vol. 1 No. 5).

# FIRST CAPITOL COMPLETES FIRST DEAL FOR CHICAGO EXCHANGE

First Capitol, a commodity price risk consulting firm and new offset aggregator on the Chicago Climate Exchange, earlier this month completed its first deal for the exchange. The agricultural methane capture project using GHD digesters at two Illinois dairies will offset approximately 6,000 MT CO<sub>2</sub>e per year through phase II of the exchange, which lasts until 2010.

### An Added Revenue Stream

Like many new offset projects coming into the market, First Capitol and the farmers are building from their previous business to generate carbon credits as an added revenue stream. "They've both been our clients for quite some time in the dairy hedging industry. We're one of the larger traders in the milk futures market in the Chicago Mercantile Exchange," said Will Babler of First Capitol who facilitated the deal. "We've got a number of other clients in Wisconsin and other places that are considering them but these have been running for about a year and a half now. So we've got some retroactive credits from 2005. About half of 2005 vintages have been issued and we've verified up until halfway through 2006."

The dairies had invested a combined \$1 to \$1.2 million last year in the digesters to capture methane to generate electricity which they now sell on the grid from 120 KW generators. This funding also included \$500,000 from state and federal grants according to Babler. Both dairies are even in size with 600 head of cattle a piece generating 5 tons CO2/year/cow, giving each dairy 3,000 MT CO<sub>2</sub>e per year. The dairies will retain all rights to the credits and methane with First Capitol issuing a fee for transactions. "Our clients retain full control over the timing, the quantity, and the price of when they want to sell their credits. We only really have the right in order to transact in the exchange," Babler said. "Since we're involved in counter derivatives, and in the futures and options market as well, as these markets mature and you start having more volatility and more risk and more dollars attached to it, there are also going to be derivatives that develop. We're excited to be able to roll that out to our clients and I think that is something most of our competitors don't have that capability of doing."

# CHICAGO EXCHANGE APPROVES IDAHO FORESTRY SEQUESTRATION PROJECT

The National Carbon Offset Coalition, a group of seven Montana non-profits, was approved by the Chicago Climate Exchange last month for a 4,700 MT  $CO_2e$  per year forestry sequestration project. The project is in collaboration with the Nez Perce tribe in Idaho and will incorporate a series of 25 different projects including fire recovery and reforestation from agriculture lands. "The tribes have a wonderful long-term opportunity here. They have professional foresters and a long term planning horizon," said Ted Dodge, executive director of the National Carbon Offset Coalition. "We've always seen the tribes as an important source of offsets. The revenue they can gain is important to the tribes."

The coalition was formed nine years ago with the intent of developing environmental conservation in the region. Several of their projects have included forestry, grass planting, and no-till agriculture for sequestration. In 2003, they received a \$300,000 grant from the Montana Governor's office to advance their portfolio. They are also a member of the Big Sky Regional Sequestration Partnership. "We got an early jump on this whole issue," Dodge said. "We have the intent of putting this all together within the next two years, so we want to hit the ground running now. We had to work through getting accepted by CCX at least on the forestry before we were going to bring a lot of projects into the portfolio because our principle purpose here is to try to design an offset program that affects what the final rules are when the United States finally enters into a cap-and-trade or makes a voluntary market work." This is the coalition's first Native American tribe offset project on the exchange.

# AG GIANT CARGILL JOINS CHICAGO EXCHANGE AS OFFSET AGGREGATOR

International agricultural giant Cargill last month joined the Chicago Climate Exchange as an offset aggregator. The company's initial efforts will be conducted through the newly named Cargill Emissions Reductions Solutions, previously Cargill Environmental Finance. "The market's needs touch on many of our core businesses, such as agricultural finance and management of commodities," said Eugenio Meschini, managing director of Cargill Emissions Reduction Solutions. "We see our role as enabling market participants to bring their projects to life, either through financing the projects, structuring of the deals or the commercialization of the credits produced." Cargill anticipates beginning with methane capture and destruction, soil sequestration, and renewable energy. "We're engaged to one degree or another with more than 100 projects across the globe right now and hope to bring as many of those to fruition as would be prudent over the next 12 months," Meschini added.

### **Emissions Business Deemed Promising**

Emissions Reductions Solutions is part of a larger program within the company called the Emerging Business Accelerator that is designed to provide a "global clearinghouse" for emerging business ideas within the company and to provide funding, staff, and oversight to cultivate these ideas. "The EBA invests in opportunities that can generate revenues within three years. Once the business has been validated in the market it is graduated into Cargill's existing organizational structure as a nascent business unit," said David Patchen, managing director of the Cargill Emerging Business Accelerator.

### Second Cargill Business in CCX this Year

Cargill has already been involved in the CCX with its Cargill Power Markets LLC (CPM), which jointed the exchange in May of this year as liquidity provider. Though the company is involved in Kyoto markets such as the European Union ETS, the Clean Development Mechanism, and Joint Implementation, this initial move to CCX was to gain a foothold in the emerging American carbon market. "With the present uncertainty of CO<sub>2</sub> regulations in the US and the clear potential for CPM customers to have greater involvement in these markets, CPM felt it was important that we work to be involved and informed," said David Gabriel, President of Cargill Power Markets. "Increased familiarity with the CCX as an emissions trading platform is an important step in this process."■

# RENEWABLE ENERGY-FOCUSED FIRM JOINS CCX AS OFFSET AGGREGATOR

Renewable energy project development company 3 Phases has entered the Chicago Climate Exchange as an offset aggregator. The company will first look to expand on its landfill and agricultural methane offsets to generate credits for the CCX. "[We are looking at] the methane in particular because we already deal with a number of either landfill gas renewable energy projects or cow-power methane renewable projects for our [Renewable Energy Certificate] business," said Gabe Petlin, senior manager of regulatory affairs at 3 Phases. "It's a natural extension to deepen our relationships with suppliers and also bring in new opportunities to the agricultural community to both improve their environment performance and meet the needs of carbon reduction markets."

### **Growth from REC Businesses**

3 Phases is yet another example of the expansion into the carbon market of groups involved in the Renewable Energy Credit industry (see related story). They are also joining a growing number of offset providers on the Chicago Climate Exchange in developing methane as a renewable energy source from landfills and dairies such as CommonWealth (GHG Vol. 1 No. 8). "We've been buying Renewable Energy Certificates from both those types of entities for some time and now we see the opportunity to deepen those relationships to include the carbon credit associated with the methane destruction at those sites," Petlin said. "We've been in the market for renewable energy since 2001 and we always saw renewable energy as a carbon market as well as did our buyers and our customers. Given the interest in carbon we just see it as a natural extension of our efforts to develop environmental commodity markets and give customers additional options for reducing their carbon footprint."

The company is currently the only 100 percent renewable direct access electricity provider in California. It also has programs with utilities to sell renewable energy such as with Pacificorp in Oregon, Palo Alto Municipal Utilities in California, Roseville Electric in California and Silicon Valley Power in California. In these markets they sell energy from not only landfill and agricultural methane but also a large load from solar photovoltaics. The sign up rate from rate payers for these programs is from 4 to 15 percent, well above the national average of 1.3 percent for the approximately 600 comparable programs nationwide, Petlin said.■

# GROUP PURSUING BROAD STANDARD FOR GHG EMISSIONS MARKETS

The Center for Resource Solutions, a San Francisco-based non profit, has created the Green-e Greenhouse Gas Advisory Group in an attempt to create a new, broader standard for the expanding retail greenhouse gas markets. The Center hopes to expand on its successful Green-e Renewable Energy Certification Program, which has produced a widely used standard for Renewable Energy Credits. CRS will take elements of different standards such as those developed by the Chicago Climate Exchange, the Climate Group, and the World Resources Institute and analyze them all to develop the best methods for greenhouse gas reduction and verification standards based on stakeholder input and transparency. "Several of the companies that we certify came to us and said they wanted more guidance on how to do that in a standard that applied better to the greenhouse gas market," said Lars Kvale, environment and verifications services analyst at CRS.

The advisory group will be composed of 15 groups including World Resources Institute, Natural Resources Defense Council, Interface, TerraChoice, Vote Solar and climate change experts Seth Baruch and Terry Surles. They expect to issue a stakeholder review in the fall with a workable standard ready during 2007. "We're not going to go to each of the standards and see necessarily did they do the right metric to calculate methane reductions," Kvale said. "We are more looking at the larger scope in terms of did they develop them with significant stakeholder input and responding to that in a transparent manner and can everybody see what the protocols are because we believe if that's the case, then there is a certainty to what they are doing and it's real and quantifiable. If that's not the case then it's hard to get trust in them for a long-term market. We want to try to build those principles to the different standards."■

# CALIF. CLIMATE REGISTRY MARKS LARGEST REPORTING YEAR

The California Climate Action Registry catalogued an estimated 125 MMT CO<sub>2</sub>e for its 62 reporters in 2005 by its preliminary Aug. 31 reporting deadline, registry officials said last week, making this the largest reporting year yet in terms of emissions. "This year we have 62 organizations reporting. I think its interesting that only about half are traditional heavy industry," said Robyn Camp, director of the registry. "There's electricity, oil and gas, mining, manufacturing, waste management, though that's not necessarily heavy industry. About half of our reporters are telecom and tech firms, universities, government agencies, and even NGOs who have joined the program not so much because they are large emitters but really because of an endorsement of the program and the importance of the activity." Official totals will not be known until the end of the year.

Cumulatively, the 2005 emissions raise the overall totals to approximately 250 MMT  $CO_2e$  in the registry since the registry's inception in 2000. In 2004, 100 MMT  $CO_2e$  were reported which means that together the past two years account for about 90 percent of the total emissions registered. The number of reporters have grown as well with 20

reporters in 2002, 40 in 2004, leading up to 62 in 2005. The California economy, the twelfth largest emitter in the world, has annual emissions of 550 MMT  $CO_2e$ .

### **Registry Open to Out-of-State Entities**

Though the registry was originally intended for California companies, it has always been open to any companies interested in tracking their emissions data. "About half of our registry tons are outside the state of California and about half are inside," Registry President Diane Wittenberg said. "We have some reporters that have no emissions in California. We have three big reporters who are reporting internationally. Those are Corning, Xerox, and Ko-dak."

### **Three New Members**

Meanwhile, the registry added three new members in the last few weeks. El Paso Corporation, the nation's largest interstate natural gas pipeline company, will begin reporting emissions in 2008. Additionally, Thums Long Beach Company and Tidelands Oil Production Company, both subsidiaries of Occidental Petroleum and contractors to the Port of Long Beach, became the first upstream oil and gas producers to join the registry.■

# Calendar

#### September

13-14 Meeting: Western Regional Air Partnership Board Meeting; Grouse Mountain Lodge, Whitefish, Mont. Contact: Lee Alter, *l a l t e r @ w e s t g o v . o r g*. In f o r m a t i o n : *http://www.wrapair.org/cal/calendar.php?op=view&id=546.*  13-15

Meeting: Plains CO<sub>2</sub> Reduction Partnership Annual Meeting; Delta Bow Valley Hotel, Calgary, Alberta, Canada; Contacts: Ed Steadman, 701-777-5279, *esteadman@undeerc.org* or Stephanie L. Wolfe, 701-777-5229; Information: www.undeerc.org/pcor/annualmtg.

(Changes from previous Calendar in Bold)

# **GHG TRANSACTIONS & TECHNOLOGIES**

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