

THE Emissions Trader

A Publication of the Emissions Marketing Association
Serving the International Emissions Trading Community

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VOLUME 4, ISSUE 1, JANUARY 2000

Buying and Selling Greenhouse Gas Emission Reductions: A Figment of Contract

BY MARK PERLIS

EMA members know what they are trading when buying or selling SO₂ or NO_x emission allowances. The allowances are created under federal or state law, entitling holders to enforceable rights to emit specified amounts of the relevant pollutant.

Allowance holdings are registered at EPA, permitting legal title to identifiable allowances to be transferred by traders.

Greenhouse gas (GHG) emission reductions or credits are very different legal creations. No present U.S. law or regulation defines or recognizes GHG reductions or credits. Thus, would-be sellers of GHG reductions or credits have no vested entitlement to any benefit under existing law. Since

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Four Factors Suggest a Big Change in the SO₂ Allowance Market

BY DAVID WOJICK, PHD

Emissions trading may be in for a big jolt in the next few years. At least four significant factors are converging on the market for SO₂ allowances, maybe more. Together they have the potential to transform the market into something very different from what we have today.

Today's SO₂ market is successful, but modest. According to EPA data, in the last five years around 30 million tons have changed hands, with over 6,000 trades and about 65% of the action involving brokers. Prices have shown interesting volatility, enough to interest traders. So the market is real and credible, if not a screamer. But big changes are on the horizon.

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4TH ANNUAL EMA



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ASSESSING THE EMISSIONS TRADING MARKETS

PROGRAM HIGHLIGHTS

- Prospects for SO₂ Trading in Phase II
- What to Expect as We Prepare for COP-6
- Recent Activity in the Greenhouse Gas Emissions Trading Markets
- Prospects for the NO_x Market in the Year 2000 and Beyond
- How Well are the Alternative and Local Markets Functioning?
- How Mature is the SO₂ Derivatives Market?
- Traditional Brokerage vs. Electrical Exchange – What does the Future Look Like?

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THE PRESIDENT'S CORNER... BY GARY HART



Greetings...

Before I give everyone an update on upcoming EMA activities and events, I need to pause and personally thank **Dan Chartier** on behalf of all EMA members for his dedication and personal commitment to making this organization a success. For three years Dan has guided us in becoming the "premier" organization promoting the concept of emission trading. Please give Dan a call or speak to him at our next meeting, and again, express our genuine appreciation for all his efforts on behalf of EMA.

I believe that your Board of Directors has lined up a great schedule for our membership for next year. First, the membership will be receiving a survey form in preparation for the Board's Strategic Planning meeting in February. We really do listen to you and we value your input and feedback so please take a few minutes and let us know where we should take EMA in the future. We will be contemplating issues such as a second phase for the Emissions Trading Education Initiative or ETEI. Secondly, you should have received your new EMA directory, if you have not, or if any corrections are required, please call **Dave Feldner** at the EMA offices.

Please mark your calendars for May 7th through May 9th as we return to New Orleans on the Monday following the Jazz Festival for our Spring 2000 meeting. We will return to our full two-day format at this meeting.

Our Fall 2000 meeting will be similar to our meeting in San Diego where we had record attendance. This will be our second International Conference and we have just signed the contracts to hold this meeting at the very exclusive Four Seasons Hotel in Toronto, Canada on September 1st through the 3rd. Rooms for EMA members at our conference rates will be available for the preceding weekend for anyone wishing to take advantage of the beautiful Toronto area next fall.

I have some "big shoes" to fill as your new EMA President and I truly need your input and support as we continue to grow the Emissions Marketing Association. As you receive your dues renewal notices for next year, please also let others know of the great educational and networking opportunities available through EMA so we can continue to support market-based environmental solutions.

In retrospect, 1999 was a banner year for EMA with the completion of Phase I of our joint ETEI project, our very successful International Conference in San Diego, our one-day NO_x focused conference in Washington, DC and our representation at the COP-5 meetings in Bonn. On a personal note, in November I traveled to China as part of a U.S. delegation to provide information to Chinese Environmental officials on the potential for establishing a SO₂ trading program in China. I will report back to you in the next issue hopefully on the success of that visit.

EMA is your organization, so please do not hesitate to call me or one of the other Officers or Board members and let us know your thoughts, comments or concerns.

I look forward to seeing you in New Orleans.

Gary Hart
grhart@southernco.com



New EMA President Gary Hart of Southern Company Services ▲

A Note from the Outgoing President

BY DAN CHARTIER

It is with great confidence that I turn over the role of President of the EMA to Gary Hart. Gary has been a tireless advocate of the EMA. As he brings his perspective and experience to the role of EMA President, I expect many more accomplishments in the years to come. For myself, I remain on the Board for two more years, and have agreed to act as Treasurer for the next year and as Chair of the Spring-2000 meeting in New Orleans.

Since as outgoing President this is my last column I will end it in the way I have ended every column for the last three years – by repeating the call for your involvement. The EMA is succeeding today due to an ever-increasing

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Outgoing EMA President Dan Chartier congratulates incoming President Gary Hart

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circle of dedicated volunteers. While our paid professional staff manages logistics such as meeting registrations, bill processing and other administrative functions in a very efficient and cost-effective manner, the true strength of the EMA is our members.

The most important way to be an EMA volunteer is to encourage new members. You all have many contacts in the industry. E-mail the name, address, phone, fax and email address of any prospect to lterry@emissions.org at the EMA office and

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The EMA is succeeding today due to an increasing circle of dedicated volunteers.

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they will add the name to our database and send out EMA membership materials. No fuss on your part and we all know how many business cards we collect at conferences. To make this task easy for myself, I lay 8-10 business cards on the copy machine glass and fax the sheet to the EMA office. This avoids the need for me to retype the contact info into e-mail.

Also, many of you are invited speakers at a good number of conferences. EMA has a set of standardized slides that you can include in your presentation to help promote the EMA. And almost all conferences have media tables that allow speakers and attendees to distribute information. If you are headed to a

conference as a regular attendee or a speaker, call the EMA office. They can ship brochures, extra copies of newsletters, and other materials directly to your destination hotel. We try to make this as easy as possible for you.

EMA members provide the content for articles in this newsletter. If you have an article or editorial opinion you want to share, the EMA is always seeking content for *The Emissions Trader*. Writing an article is an easy way to showcase your expertise. Contact the EMA office for publication deadlines and other details if you're interested in this opportunity.

EMA members plan the content for all of our conferences. Volunteers are always needed to help plan topics, locate qualified speakers, and to act as moderators. Planning is well along for the Spring 2000 meeting, and is just getting started for the Fall 2000 International Conference. If you want to get involved or have an idea for a topic or speaker, contact the EMA office.

We are also seeking to make our web site a place where members and non-members turn for information on emissions trading. We are seeking members willing to work on a small committee to guide our online content. No programming experience is necessary. EMA's staff will handle site management, we just need you to help guide the content, help keep links updated, and post online content on a regular basis. If you want to be involved contact the EMA office.

As you can see, there are many ways to be involved and many levels of involvement. Getting involved in the EMA's activities is just a phone call or an e-mail away.

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Emissions Marketing Association Elects New Board Members and Officers

The Emissions Marketing Association announced the results of the election of association board members and officers during the EMA Business Meeting on Tuesday, October 19, 1999.

Elected to serve a three year term on the Board were:

Carlton W. Bartels

Managing Director, Cantor Fitzgerald Environmental Brokerage Services

EBS provides brokerage and consulting services in all national emissions trading programs. Mr. Bartels has promoted emissions trading through dozens of articles, conference talks, testimony before the U.S. Congress and White House Climate Change Task Force, and as an EMA conference program chair.

Andrew Ertel

Mr. Ertel founded the New Markets Group as a Principal at Natsource, Inc. His responsibilities included managing the brokerage desks for their emissions, coal, and weather desks. Prior to Natsource, Mr. Ertel worked for Gerald Energy in the Natural Gas and Oil futures markets. Andy is a former member of the NYMEX, having traded crude oil for his own account. Mr. Ertel serves as a member of the NYMEX coal futures advisory board. Andy attended the Crouse Hinds School of Management at Syracuse University.

EMA officers elected for a one year term were:

President – Gary Hart

Manager, Clean Air Issues/SO₂ Allowances, Southern Company

Mr. Hart is a native of Birmingham, Alabama and a graduate of the University of Alabama with majors in Finance and Accounting. He is a Certified Management Accountant, and a past President of the Birmingham Chapter of the National Association of Accountants. He has over 20 years experience with the Southern Company where he has held various positions such as Assistant to the Vice President and Comptroller of Alabama Power Company and his current position of Manager of Clean Air Issues/SO₂ Allowances.

During 1998 and 1999, he made numerous presentations on emissions trading and clean air compliance to groups such as: The National Association of State Legislators, The National Association of State Energy Officials, The University of Illinois at Chicago, The Global Climate Coalition in Washington DC, and the Large Public Power Association in Washington DC. In November, he is scheduled to be part of a U.S. delegation headed to China to conduct workshops with the Chinese government to explore the possibility of implementing a SO₂ trading system in China.

ETEI Publishes Emissions Trading Handbook



Emissions Trading Education Initiative

The Emissions Trading Education Initiative (ETEI) has published an Emissions Trading Handbook. The 52-page primer is intended to serve as an industry resource on emissions trading.

The handbook is part of an ongoing cooperative effort of the Emissions Marketing Association (EMA) and the Environmental Defense Fund (EDF) to make educational resources available on emissions trading. Other resources include a ten-page brochure, a video, and a website at www.etei.org

Personal copies of the handbook and brochure can be downloaded at the website. The handbook, brochure, and video may be ordered through the website or by contacting the ETEI office at:

ETEI • 611 East Wells Street • Milwaukee, WI 53202

ETEI Program Director David Baumann attributed the high quality of the educational materials to the efforts of an “excellent working group consisting of representatives of EDF and EMA.” Baumann said the new educational tools were a first step in an ongoing effort to inform industry and the public about the mechanisms and experience with emissions trading.

Vice-President – Andrew Ertel (see biography above)

Secretary - Mark Perlis

Energy and Environmental Law, Dickstein Shapiro Morin & Oshinsky LLP

Mark specializes in electricity industry restructuring, and SO₂, NO_x and international greenhouse gas emissions trading. Mark serves as Secretary and as a member of the Board of Directors of EMA. Mark chaired EMA's Spring Conference in May, 1998 and is Vice-Chair of the American Bar Association's Special Committee on Climate Change and Sustainable Development.

Treasurer - Daniel Chartier

Emissions Marketing Manager, PG&E Generating

Mr. Chartier oversees PG&E's emission portfolios in the SO₂, NO_x and greenhouse gas emission markets. Mr. Chartier has over 13 years experience in the electric utility industry, and has specialized in emissions trading for the last 8 years. Mr. Chartier has a Bachelors Degree in Mechanical Engineering and an MBA, both from the University of Wisconsin-Milwaukee.

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Four Factors ...from Page 1

Two factors are obvious, but still need to be assessed. They arise because Phase II of the trading program is upon us. First, the number of generating units getting, and in most cases needing, allowances jumps 20-fold, from 110 to 2,587. Moreover, of the original 110 units, many were owned in large groups by large utilities. Phase II brings a whole new set of players into the game, including many smaller municipal utilities and cooperative G&T's, who have smaller and fewer units each. Many of these newcomers respond to different political pressures, and have different appetites for risk, than do the giant IOUs.

Secondly, the emission levels become much more stringent, basically going from 2.5 pounds per million Btu to 1.2 pounds. Changing the levels changes the economics of compliance. Over-compliance in Phase I was largely the accidental byproduct of switching to PRB coal. In fact Western coal production exceeded Eastern in 1999 for the first time. Whether PRB coal can economically, or politically, penetrate and dominate the eastern coal states remains to be seen. Likewise for becoming the fuel of choice for the municipal and cooperative sectors, especially the municipals.

Another factor of enormous potential significance is the merchant power plant boom. With peak demand growing around 20,000 MW per year, the U.S. desperately needs new generating capacity. In a recent study, Resource Data International projects about 80,000 MW of new capacity by 2003, mostly merchant projects.

How all these plants, which will cost from \$40 to \$80 billion, will be financed remains to be seen. RDI projects most of this capacity to be gas-fired, but that too remains to be seen. Merchant plants have to make money and natural gas is still expensive. It is unlikely to get cheaper with mushrooming demand. In fact the infrastructure is not even there to deliver it.

The merchant plant fuel issue is crucial for the allowance market, for two reasons — new plants do not get allowances, but gas emits no SO₂.

On the one hand, if some of the new plants burn coal, they will need to obtain allowances for every ton of SO₂ they emit, unlike existing plants. Kansas City Power & Light recently announced that they would build a new 500 MW coal plant, so the technology is not dead. New coal-fired plants create an entirely new market for allowances, driving the price up.

On the other hand, if new gas-fired combined cycle plants knock off existing coal-fired plants then an existing market for allowances is wiped out. A lot of excess allowances could be generated this way, driving the price down. RDI estimates that about 74,000 MW of existing coal-fired capacity is at risk of being displaced by gas-fired in 2003. So the potential impact of the projected merchant plant building boom on allowances is large and uncertain. It is unlikely to be a wash.

Further complicating the equation is the fourth major factor — environmental regulation. There is an unprecedented amount of turmoil in the area of NO_x control. EPA's new NAAQS for ozone and fine particles, both of which implicate NO_x, have been remanded for reconsideration.

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Buying and Selling ...from Page 1

GHG reductions and credits are not recognized under law, traders cannot register holdings or trades. In short, title to GHG reductions or credits does not really exist, at least not in the traditional legal sense applicable to SO₂ and NO_x allowances.

So what are buyers and sellers of GHG reductions and credits selling in this legal limbo? The principal answer is that buyers and sellers are transferring whatever their contracts say. Until governmental rules define matters otherwise, GHG reductions and credits are a figment of parties' contracts. Parties are not selling vested entitlements to emit carbon emissions, because no U.S. law grants such entitlements today. Rather, parties are allocating possible future rights or benefits that may be created under law with respect to certain emission activities or GHG reductions.

Parties trading GHG reductions need to define "reductions" or "credits" and not assume a common usage meaning. For example, parties need to state explicitly whether a buyer of specified GHG reductions only gets benefits if the U.S. enacts a program of early action credits, or whether buyer becomes entitled to a portion of any allowances that may be

No present U.S. law or regulation defines or recognizes GHG reductions or credits.

awarded to seller under any future statutory scheme? Note that even proposed U.S. early action legislation does not carefully define the entitlements that attach to GHG credits. While Congress can leave such difficult tasks to regulations and administrative determinations, parties to contracts are left only with the language of their own choosing. A GHG credit created by contract is not, therefore, necessarily the same thing as a GHG credit created by a future statute.

The crux of the GHG contract is not merely defining terms. The heart of a contract to sell GHG reductions or credits is the allocation of rights and interests under uncertain future legislation and regulations. The GHG contract must specify which benefits that may arise under future legislation and that may be connected in some direct or indirect way to specified GHG reductions are to be yielded up by seller to buyer. That is, when will buyer stand in seller's shoes with respect to uncertain future GHG legislation or regulations? Parties can either specify clearly the future interests being transferred in their GHG contracts, or else risk exposure to messy, future litigation, and to a market constricted by perceptions of amorphous legal rights and cloudy title to GHG reductions.

ABOUT THE AUTHOR

Mr. Perlis practices energy and environmental law with Dickstein, Shapiro, Morin & Oshinsky LLP in Washington, DC. Mark specializes in electricity industry restructuring and SO₂, NO_x and international greenhouse gas emissions trading. Mark chaired EMA's Spring Conference in May 1998 and is Vice-Chair of the American Bar Association's Special Committee on Climate Change and Sustainable Development.

EMA on the WEB

Did you know when you visit the EMA at www.emissions.org you can find the online member directory, past issues of The Emissions Trader, along with other helpful sites and publications including a trader's sample purchase and sale agreement?



Some of the sites you can link to at www.emissions.org include:

- Chicago Board of Trade
- New York Mercantile Exchange
- US EPA Acid Rain Home Page
- EPA Allowance Tracking System Reports and Federal Register On-Line.

Updates to the 4th Annual Spring Meeting will be posted on the web.



▲
Chris Dekkers, NO_x Trading Programme Coordinator, the Netherlands, presented an informative luncheon program on the current state of NO_x emission trading in the Netherlands to the 106 attendees at the EMA 3rd Annual Fall Meeting held on October 19, 1999 in Washington D.C.

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Four Factors ...from Page 6

Their ozone transport rule based on 85% NO_x reduction in the 22 Eastern most states, where two-thirds of coal-fired capacity resides, is before the same court and not looking well. EPA has resorted to suing the largest individual plants by name. They have also said they reserve the right to extend ozone transport rule to the 36 Eastern most states.

The competitive viability of coal-fired generation is highly sensitive to the amount and cost of required NO_x controls. At \$2000 a ton of NO_x, EPA's cutoff point for the transport rule, coal is probably not competitive. If NO_x controls are imposed, and if they turn out to be this expensive, and a significant number of coal-fired plants switch to natural gas, then the SO₂ allowance market is a dead duck. But a NO_x allowance market might take its place.

In fact, many in the environmental community say they will settle for nothing less than a complete shut down of most of the coal-fired generation plants in the nation, for reasons up to and including mercury and CO₂ emissions. It is their top

priority. Obviously, with 9 million new tons being printed each year, this would render SO₂ allowances worthless. Title IV would become an interesting moment in history.

At the other extreme, since anyone can buy allowances there is always the possibility that trading will become a vehicle for Wall Street speculation. In principle the value of tons could be almost completely divorced from the needs of power generators. Commodity markets are like that, a wild-card game.

Interesting times indeed. Good times for people who like uncertainty. Hard times for those that don't. In other words, allowance trading may be about to transition from a modest market into a truly high stakes game.

ABOUT THE AUTHOR

Dr. Wojcik analyzes air emissions and climate change issues for Electricity Daily. His consulting clients have ranged from the AES Corporation and Allegheny Energy, to the Chief of Naval Research and Greening Earth Society. At Carnegie Mellon University, Dr. Wojcik helped found the Department of Engineering and Public Policy.

EMA Mission EMA was founded to foster market-based trading solutions for environmental control. EMA promotes the advancement and application of policy and regulation relevant to market-based emission trading systems. EMA encourages and facilitates information exchange among members and other professional and technical groups, and the public. EMA provides programs in education and training to improve knowledge and skills of members and the public.

