

THE Emissions Trader

A Publication of the Emissions Marketing Association

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GUEST ARTICLE

The Kyoto Protocol: EMISSIONS TRADING ON THE WORLD STAGE

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CHANGE TASK FORCE

Just before dawn on December 11, 1997, negotiators from nearly 160 nations reached agreement in Kyoto, Japan on an historic climate change protocol. In it, emissions trading arrived on the world stage in a major way for the first time.

The protocol's market-based policy framework will guide energy and environmental performance in the developed world for decades to come. It will also begin to influence the directions of sustainable development in the developing world. At its core, the accord embraces most of President Clinton's highest policy priorities by combining binding emissions targets with a flexible emissions trading mechanism to ensure cost effectiveness.

Climate change is emerging as the most important international environmental challenge of our generation. It is a tough problem to understand, to manage and to negotiate about. But it is too important to ignore.

Some observers are daunted by the complexity of the issue, while others see tremendous new opportunities and business potential in the solutions. Given the protocol's strong reliance on emissions trading principles, emissions traders are poised to be counted among the latter set as major contributors to these business solutions.

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Spring Emissions Trading Conference

NEW ORLEANS
MAY 4-5, 1998

The EMA and the US Environmental Protection Agency are proud to once again cosponsor the Spring Emissions Trading Conference. Join us in New Orleans where we'll be offering technical sessions on a wide-range of emission trading topics, including an update on the Kyoto Protocol. Guest speakers are being invited as this issue of The Emissions Trader goes to press. We will be mailing a complete agenda and registration materials by the end of February.

The conference will be held May 4-5 (Monday & Tuesday). However, we have a limited number of rooms reserved for May 1 and 2 (Friday & Saturday). These dates fall during the New Orleans Jazz Fest so airline and hotel reservations will be in great demand. We urge you to make both now!

Hotel room rates are \$152/single and \$170/double. **Important:** You must say you are with the Emissions Marketing Association to receive the room rate and a hotel room. The conference will be held at

THE HOTEL INTERCONTINENTAL NEW ORLEANS

444 ST. CHARLES AVENUE

NEW ORLEANS, LA 70130-3171

RESERVATIONS: 1-800-445-6563 • FAX: 504-523-7310

THE SPRING EMISSIONS TRADING CONFERENCE IS CO-SPONSORED BY



Meet one of the Guest Speakers for this event on page 2...

Spring EMA updates posted at www.emissions.org



THE PRESIDENT'S CORNER...



It's 1998 already! How did that happen?

If you are anything like me, you may have found yourself asking that same question in the past few weeks. 1997 was a great year. But it sure was busy. Forming the EMA and then watching it grow has been very fulfilling. My thanks to the many people who supported me in this effort, from the Board members, to the speakers willing to come to this new group's first two conferences, to my boss who didn't think my idea of starting a new trade group from scratch was too risky and provided EMA's start-up funding.

Plus, my thanks to Cheryl, my very patient wife, who put up with a quite a few travel days as invitations to attend conferences and workshops on emissions trading multiplied due to my role as EMA's first President. With a 2-1/2 year old at home, being on the road isn't easy for her, but she knows how much I enjoy my work.

I look forward to just as busy and successful a year in 1998. We have dates set for both the Spring and Fall Conferences, and have more speaker ideas and topics than space allows for. Support continues to pour in for the EMA. We have the Acid Rain Division of the EPA back as a conference co-sponsor, and are talking to other groups about the potential for joint meetings, shared mailing lists and other mutually beneficial topics. People keep joining EMA as the word of our group spreads. And most importantly, members continue to step forward to help organize conferences, solicit speakers and keep the momentum that the EMA has developed.

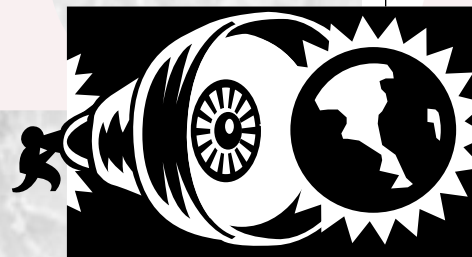
Please enjoy this issue of The Emissions Trader. And keep in mind we are always looking for anyone willing to lend a hand, write an article for a future issue of this newsletter or offer a suggestion. Feel free to contact me or any of the other officers or directors with your feedback or to volunteer to lend a hand.



Best wishes for a safe and prosperous New Year!

DAN CHARTIER

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EMA Spring Meeting Preliminary Conference Program

Energy Market and Environmental Regulations

- Projected Impacts of Utility Deregulation
- Effects of Environmental Regulations on Phase II Allowance Prices

Global Climate Change –

Emissions Trading Under Kyoto Protocol

- Global Emissions Trading
- CO₂ Emissions Trading Opportunities
- Environmental Community Perspective
- Kyoto Implementation – An Administration Perspective

First Steps Toward Implementation of Early Reduction Credit

Regional NO_x Trading

SO₂ Issues

Best-Selling Author to Present at the EMA Spring Meeting



Leil Lowndes

Best-selling author of *How to Talk to Anybody About Anything*, Leil Lowndes will conduct a two and one-half hour communications workshop during the EMA Spring Meeting in New Orleans.

Ms. Lowndes is an internationally acclaimed communications expert who coaches top executives of Fortune 500 companies as well as front line employees to become better communicators.

President of Applause, Ltd., Leil's clients span a wide range of industries: The Walt Disney Company, Kodak Cameras, Keds Shoes, Folger Coffee, and Mattel Toys to name a few. She is the author of five books and her articles have appeared in professional journals and popular publications such as *Psychology Today*. Ms. Lowndes' workshop is included in the cost of the conference registration fee and is open to all attendees.

On the Web at <http://www.emissions.org>

Be sure to keep track of the EMA's web site. Check out the current list of member companies, download the EMA's Bylaws to get the details on the recent changes, locate a phone number for an EMA officer and much more. And keep checking back. New members are added all the time. Plus, in 1998, we hope to publish an on-line membership directory, add links to additional valuable sites, and by the end of February the on line registration form will be ready for the Spring 1998 Conference.

Members in the News

Ilene Wilder has moved to Doyen and Associates, Incorporated as Business Development Manager. Doyen and Associates, Incorporated is a full service consulting engineering firm based in Chicago. We are glad to have Ilene rejoin the EMA at her new employer.

The new representative from Sargent & Lundy, LLC is **Bill DePriest**. Bill replaces Ilene Wilder.

Trevor Vaughn has joined the emissions brokerage team at Natsource. Prior to joining Natsource, Trevor spent 3 years in the NYMEX natural gas futures pit. Welcome to the EMA, Trevor.

Enron Capital and Trade Resources adds the experience of **Scott Kushnick** to its ranks. Prior to joining Enron, Scott work as an emissions broker at Natsource. Good luck in your new position Scott.

Did we miss some news. Let us know. E-mail newsworthy tips to comments@emissions.org, or call the EMA at 414-276-3819 and ask for Dave Baumann.

Check Your In Basket

Is your EMA Member Survey someplace at the bottom of your In Basket? If you answered this question yes, consider taking the time to fill out the survey and return it to EMA. We need your input to continue to design programs that meet your needs. If you need a new copy of the survey, call the EMA's office.

Future Issues

In 1998 we're publishing *The Emissions Trader* quarterly. Watch the April issue for pictures from the Phoenix golf outing last fall. Plus, we are looking for aspiring writers. If you have an emissions trading topic you would like to write on for a future issue of *The Emissions Trader*, contact anyone from the Editorial Committee to discuss your idea.

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THE EMA WANTS YOU!!!...

Fall elections may seem a long time away, but now is the time to call for nominations for seats on the Board of Directors.

The EMA's bylaws have been revised to more completely define a process for seeking nominations for Board vacancies and to allow for a mail-in ballot. If you want to be considered for a position on the EMA's Board of Directors, please make your intentions known by May 1, 1998. Two Board seats will be up for election this Fall. Please contact Dave Baumann, EMA's Executive Director, in writing if you would like to be considered or wish to nominate another member.

EMA Board Retreat

The EMA Board of Directors will spend February 3 & 4 in a planning retreat. Topics that will be discussed include:

- Setting policy for meeting co-sponsorships from by outside groups
- Determining web site management policy related to requests for links to commercial sites
- Working on a long-term strategy including deciding if growth as an international organization supporting emissions trading of greenhouse gas emissions should be a long term goal.
- And much more.

The results of the retreat will be shared in a future issue of *The Emissions Trader*.

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Ilene Wilder, Doyen and Associates, Incorporated / Dana Eales, FirstEnergy / Dan Chartier, Wisconsin Electric / David Baumann, EMA Executive Director

Send suggestions, news articles and feedback to: comments@emissions.org, or call the EMA at 414-276-3819, Fax: 414-221-3349. Or write us at the address above.

Internet site: www.emissions.org

The Kyoto Protocol: EMISSIONS TRADING ON THE WORLD STAGE

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In fact, those already experienced in emissions trading markets are viewed with suspicion around the world as having potential competitive advantage as the new carbon emission market emerges. Emissions traders have a great deal to offer the international community in promoting greater understanding of these concepts and building experience with their actual operation.

As companies plan business strategies that take carbon mitigation into account, the features of emissions trading contained in the Kyoto Protocol should be well understood. In far too many discussions leading up to Kyoto, there was a tendency to focus only on the numbers — the targets and timetables — such as which nation was proposing the best target, or the most realistic target, or the biggest target. These numbers matter, to be sure, but the real struggle was to develop the policy infrastructure to enable nations to achieve the targets at affordable cost.

Economic studies show how much the policy framework matters. For example, early in 1996, EPRI found that if the OECD¹ tried to stabilize emissions 20% below 1990 levels from 2020 and for the rest of the century, it could cost the world economy over \$2.5 trillion (net present value). But when they modeled that same tonnage reduction and allowed it to be achieved through global joint implementation, the cost was cut by about 65%. When they combined this locational flexibility with optimal timing, the cost dropped by over 80%. The same tonnes, a fraction of the cost — it should sound a familiar ring to SO₂ traders. Flexibility measures, as you well understand, are in the interest of American industry, our nation and the entire world economy. And they are in the interest of the global environment, as these approaches allow us to get the greatest environmental benefit for every dollar spent.

For emissions trading experts, there are several features of flexibility to watch for in the agreement: the ability to maximize efficiency by achieving tradable reductions in any gas, any source or any sink; flexibility to conduct trades from excess reductions from a variety of locations, both international and domestic; ability to

gain efficiencies from intertemporal trades (including reasonable target periods, banking and borrowing); and strong reporting, verification and compliance mechanisms. The U.S. advocated provisions that cover this entire horizon of flexibility while assuring solid environmental performance.

The U.S. fared well in achieving these priorities, though several require further elaboration in future negotiating sessions. While the international terminology takes some getting used to, I hope readers can see the framework emerge. It erects a relatively simple construct around a very complex problem.

Emissions budgets: the agreement contains 5-year emissions accounts rather than single year targets. This feature provides important timing

involved with these gases supported this approach, as did environmental groups. For the businesses, there was interest by some in the flexibility that would be available to cut whichever gas proved most cost effective, and others sought inclusion so that they would not be “sitting ducks” for harsher treatment in the next round of talks.)

In the end, the protocol required the first three gases to take a 1990 baseline. With the second three, nations may opt for a 1995 baseline (which is higher than their 1990 levels). This was a change from our original position of using a unified 1990 baseline. By agreeing to the change, the U.S. was able to offer a 1.5 - 2% reduction with no change in our proposed level of effort.

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“Emissions Traders have a great deal
to offer the international community..”

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flexibility for firms to manage their emissions. Prior to Kyoto, many nations had not supported this idea, and its inclusion is a significant achievement.

Target and timeframe: the agreement contains our preferred timing of 2008 to 2012, which was also supported by Japan, Canada and several others. Europe and the “G-77² and China” (developing country block) had supported earlier, more dramatic cuts of 7.5% by 2005 and 15% by 2010. We agreed to cut emissions by 7% during 2008 to 2012 — but as I will describe below, this level reflects a cut of only 2% below the President’s original proposal of stabilization due to some accounting changes made in other provisions.

All Six Gases and Sinks: the agreement covers all six major greenhouse gases and sinks. Prior to Kyoto, there was little support for inclusion of all gases and sinks at the outset. Most wanted only CO₂, N₂O and CH₄. The U.S. sought inclusion of those gases plus HFCs, PFCs and SF₆ (all from 1990 levels). These second three gases are important to include, because they are highly potent gases that are growing in their use. (As an aside, it was impressive that most U.S. industry

The U.S. also prevailed on full inclusion of “sinks” (offsetting emissions growth with carbon absorbed by vegetation). In fact, the method used in the protocol was more favorable than our proposed approach. This new accounting feature enabled us to agree to around 3 - 4% further reduction with no change in level of effort.

The combined effect of the new baseline treatment on gases and sinks means that the 7% reduction target for the U.S. is, in terms of level of effort, only about an additional 2% cut from our original stabilization offer.

Differentiation: after a long history of skepticism about the notion of “differentiation” (wherein different nations take on different target levels), the U.S. agreed to accept this policy in order to address particular concerns of some nations. Japan, for example, has already made great strides in efficiency, and Norway, with most of its energy from hydropower and natural gas, begins with an extremely low baseline. These targets — ranging from 10% above 1990 for Iceland to 8% below for the European Union — are set forth for every developed nation in Annex B to the Protocol.

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Mandatory Harmonization: the agreement does not require mandatory policies and measures. Europe sought a mandatory list of harmonized policies and measures to be taken by all developed nations. The U.S. and most other nations opposed this approach and favored giving nations flexibility to achieve the targets with whatever measures make sense in their unique circumstances. For most U.S. industry, this was a key concern — auto companies feared new international CAFE standards, coal and oil companies feared new international carbon taxes, appliance manufacturers feared new international efficiency standards — the list could go on and on.

Joint Implementation: the basic idea of joint implementation was approved, although under a new banner called the “Clean Development Mechanism.” Championed by Brazil, this provision opens a multilateral facility that will be empowered to review individual projects such as those sponsored by a firm in one nation and implemented with a firm in another nation. While many nations had concerns about joint implementation going into the conference, this compromise drew broad support. Beginning in 2000, the mechanism can begin certifying reductions in any one of several facilities to be set up. Further specifics will be elaborated in the next round of talks.

International Emissions Trading: the U.S. gained acceptance of the idea that nations with binding emissions budgets can authorize their firms to engage in trading of emission allotments, although there will be further work on the details of how this will work. For the first time, the international community accepted this approach, which is working so well in our domestic acid rain program — emission reductions are nearly 40% ahead of schedule at about a mere fraction of the predicted costs.

European “Bubble”: the European Union won approval of permission to reshuffle their targets internally under a unifying “bubble.” Similar to emissions trading, this policy allows nations like Portugal to grow so long as Germany and the United Kingdom make extra reductions.

Banking and Borrowing: the agreement permits some emission reductions to be banked, but we still need to work on borrowing. On banking, there is an important feature of the “Clean Development Mechanism.” It can begin issuing certified reduction credits in 2000, which in essence begins a form of banking for those projects. The U.S. found little support for our idea of emissions borrowing, where nations could exceed their emissions budget by a small amount, so long as they deducted the amount with interest from the next emissions budget period. This could be seen as a feature of economic

flexibility, or as an important compliance mechanism as those who exceed their limits are forced to repay the tonnes to make the system whole.

Compliance Provisions: the U.S. sought strict compliance measures, primarily through the borrowing and repayment concept. Unfortunately, the agreement does not include this specific provision; instead, it creates a process to determine appropriate compliance mechanisms.

Compensation and Penalty Funds: there was no agreement on ideas offered by OPEC nations that they be compensated for lost oil revenues associated with climate actions being taken in the developed world. Similarly, we defeated ideas offered by developing nations that a financial penalty on each ton emission above the target be paid into a special international fund.

All Nations Take Action: the U.S. did not achieve our goals in this regard, and we will pursue this in future sessions. This does not mean that developing nations will not be involved. They will be bound under the existing Rio Convention to undertake actions to address climate change, they are permitted to “opt in” to the Kyoto Protocol at a differentiated target level that the parties agree upon, and they may participate in clean development projects in partnership with developed country firms.

These are the key outcomes of the policy priorities the Administration took to Kyoto, and I think you can see that most of our preferred

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“The U.S. gained acceptance of the idea of... trading of emission allotments.”

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structure won approval. There is still a great deal of work to be done — the next Conference of the Parties will occur in November in Buenos Aires, Argentina. The agenda will include further work on the details of emissions trading and the Clean Development Mechanism, compliance mechanisms and beginning consideration of developing country commitments.

For U.S. firms, there will be opportunities for involvement in further policy development here at home as well. The President challenged industries to put together their own voluntary action plans. And soon, the President’s budget will be unveiled with further details about the \$5 billion technology investment program to prompt climate action. The Administration will also begin work on our domestic emissions trading program, and we will invite input from a variety of viewpoints. So as anyone can see, the next phase promises to be an even more important time to be engaged in the policy dialogue and to begin putting your company’s plans into action. **ema**

¹OECD, the Organization for Economic Cooperation and Development, is an intergovernmental organization of 29 countries dedicated to promoting the principles of the market economy.

²“G-77” is a coalition of 132 developing countries aligned to articulate and promote the collective economic interests, and enhance the joint negotiating capacity, of developing nations on major issues.

1998 Dues... Something New

Effective immediately, dues will now cover the calendar year period from January 1 through December 31 of each year. This will simplify the processing of dues and will allow EMA to better keep track of who is paid and entitled to vote on EMA business. In 1998, dues are \$500 per person, and \$150 for persons qualifying for the non-profit, government and academic rate.

Another change is the simplification to two membership classes: One class for individual members that has voting rights, and one class for members from non-profit groups, government and academia with no voting rights. The old system, which had offered discounted, non-voting membership for additional individuals from the same company, was overly complex and not well received by members. As a result this category was eliminated.

If you have any questions on the new dues policy, or your 1998 Dues Invoice, or did not receive an invoice, contact the EMA's office at 414-276-3819.

We're Going to Disney World!!!!

Mark the dates of November 9th and 10th on your calendar. The EMA's 1998 Fall Emissions Trading Conference will be held at the Hilton in Walt Disney World Resort.

As an "Official" hotel of Walt Disney World, this world famous resort offers a friendly atmosphere and exceptional facilities. Set amid 23 acres of beautifully landscaped paradise, inside the Walt Disney World Resort Area the 814 guest rooms and suites offer a comfortable retreat for both the young and the young-at-heart. Enjoy complimentary and continuous transportation to the MAGIC KINGDOM Park, EPCOT, Disney-MGM studios and opening in April 1998, Disney's largest Theme Park yet, Disney's Animal Kingdom! And it's just within footsteps of Downtown Disney featuring The Disney Village Marketplace, Pleasure Island, and Disney's West Side.

If you want to get a head start on planning in order to make this a family get-away or mini-vacation, contact the EMA's office for additional information.

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