

Chicago Climate Exchange[®] Inc.



Paula DiPerna
Executive Vice President for Corporate Recruitment
and Public Policy

312-554-3350

www.chicagoclimateexchange.com

WRAP Meeting on Climate Change
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CHICAGO CLIMATE EXCHANGE, INC.



What is Chicago Climate Exchange?

Chicago Climate Exchange (CCX[®]) is the world's first and North America's only voluntary, legally binding pilot greenhouse gas reduction and trading program for emission sources and offset projects in North America and offset projects in Brazil.



Emissions Trading and Climate Change—Evolution

- 1992 Rio Earth Summit's historic international commitment to act on climate change introduced concept of GHG market solution
- Successful experience with the EPA SO₂ emissions cap-and-trade program provided a precedent
 - Established action based on the Precautionary Principle
 - Individual trades provided models and lesson
 - Strong evidence that greenhouse gases are and have influenced climate change and associated extreme weather events
- Societal demand for action prompted corporate and public entities to take the lead, as well as
 - Respond to shareholder interests and enhance value
 - Demonstrate public sector leadership and good governance



CCX Objectives

- Begin reducing absolute emissions with standardized verifiability, rigor and reasonable flexibility
- Build needed institutions - for multiple sectors and all six greenhouse gases – by building and refining a comprehensive environmental market including cap and trade, offsets, verification, trading and true-up
- Develop market infrastructure and management skills
- Focus attention on economics and price
- Build internationally compatible standards



CCX Members

Aerospace and Equipment

Rolls-Royce

Automotive

Ford Motor Company

Chemicals

Dow Corning

DuPont

Diversified Manufacturing

Bayer Corporation

Interface, Inc.

Ozinga Bros

Electric Power Generation

American Electric Power

Central Vermont Public
Service

Green Mountain Power

Manitoba Hydro

TECO Energy, Inc.

Electronics

Motorola, Inc.

Environmental Services

Waste Management, Inc.

Food Processing

Premium Standard Farms

Forest Products Companies

Abitibi-Consolidated

Aracruz Celulose S.A.

International Paper

Mead Westvaco Corp.

Stora Enso North America

Temple-Inland Inc.

Information Technology

IBM

Municipalities

City of Boulder

City of Chicago

City of Oakland

Pharmaceuticals

Baxter Healthcare

Private University

Tufts University

Public Universities

The University of Iowa

University of Minnesota

The University of Oklahoma

Recreation

Aspen Skiing Company

Semiconductors

ST Microelectronics

Steel

Roanoke Electric Steel Corp.

Transportation

Amtrak



CCX Associate Members

Architecture/Planning

Mithun, Inc.

Brokerage Services

Amerex Power

Consulting

Domani LLC

Global Change Associates

Natural Capitalism, Inc.

Rocky Mountain Institute

Energy Management Services

Orion Energy Systems Ltd

Sieben Energy Associates

Thermal Energy International

Engineering

Vanasse Hangen Brustlin, Inc.

Financial Services

Access Industries, Inc.

Information Technology

Open Finance LLC

The Intercontinental

Exchange

Legal Services

Foley & Lardner

Non-Governmental Organization

American Coal Ash

Association

American Council on

Renewable Energy

Delta Institute

Houston Advanced Research

Center

World Resources Institute

Private College

Presidio World College

Risk Management

The Professional Risk

Managers' International

Association

Religious Organization

Jesuit Community of Santa

Clara University

Retiring/Offsets

Carbonfund.org

SRI Fund

Pax World

Technology

Millennium Cell

Polar Technology

TerraPass



Participant Members

Offset Aggregator

Iowa Farm Bureau

Offset Provider

Klabin S.A.

Resource Technology Corp.

Restoration Soil & Research, Ltd.

Sustainable Forestry Management, Ltd.

Liquidity Providers

AGS Specialists LLC

Michael R. Anderson

Breakwater Trading LLC

Raymond S. Cahnman

Calyon Financial, Inc.

Thomas H. Dittmer

Eagle Market Maker, Inc.

FCT Europe Ltd.

First New York Securities LLC.

Goldenberg, Hehmeyer & Co.

ICAP Energy LLC

Liquidity Providers Cont.

Christopher J. Johnson

Kottke Associates, LLC

The League Corporation

Marquette Partners, LP

Glenn M. Miller

Douglas M. Monieson

Natsource LLC

Peregrine Financial Group

Rand Financial Services, Inc.

REFCO LLC

Brian Rice

Serrino Trading Company

Shatkin Arbor, Inc.

C. Richard Stark, Jr.

Jeffery B. Stern

Lee B. Stern

TradeLink LLC

Tradition Financial Services

TransMarket Group LLC



Newly Announced CCX Members As of August 2005

Members

- **City of Portland, Municipality**

Participant Members

- **Haley Capital Management, LLC, Liquidity Provider**
- **Joseph Gressel, Liquidity Provider**

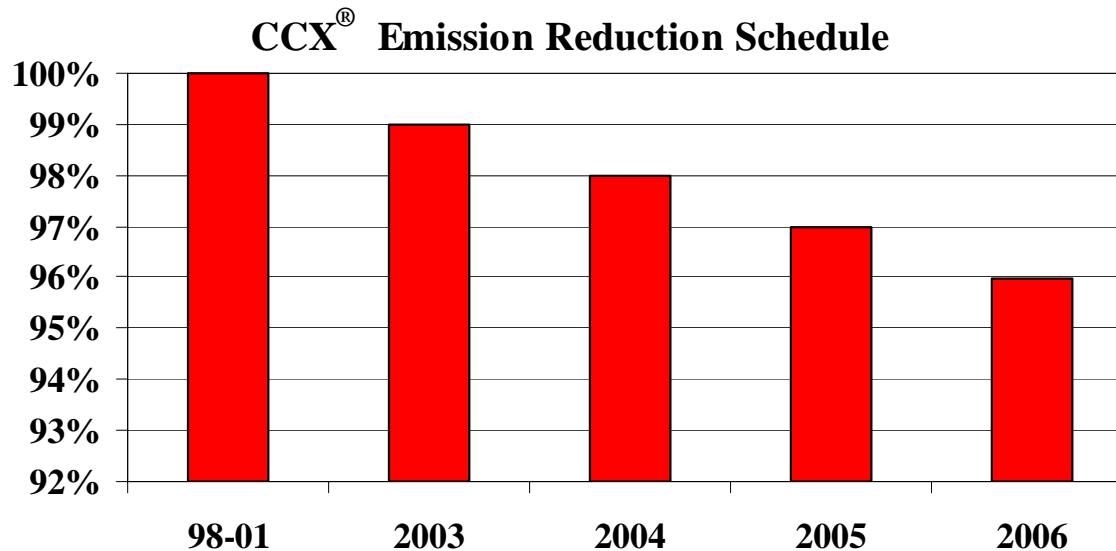
Associate Members

- **Airtricity, Wind Developer**
- **Midwest Energy Efficiency Alliance, NGO**
- **MB Investments, LLC, Private Investment Firm**



CCX Core Elements

1. Members make a legally binding commitment to
 - Reduce 1% per year from 2003 -2006 below an average baseline of 1998-2001



2. Independent verification
3. Annual true-up
4. Pre-defined offset projects (relevant for ranchers, farmers)
 - Landfill and agricultural methane destruction
 - Sequestration: reforestation, agricultural soils



What is Traded?

- CCX Members buy and sell Carbon Financial Instruments (CFIs).
- Each CFI is standardized to equal 100 metric tons of CO_{2e}.
- All trading takes place on the CCX electronic trading platform with login access from the CCX website.



CCX Operations and Governance

CCX Operations include:

- Use of WRI/WBCSD emission calculation methods
- CCX[®] Registry: official holder and transfer mechanism
- CCX[®] trading platform: integrated with Registry
- Clearing facility: trades guaranteed
- NASD provides market surveillance and emission verification

• CCX Governance:

- Self-regulatory organization overseen by Committees comprised of exchange Members, directors and staff
- Committees: Environmental Compliance, Forestry, Membership, Offsets, Trading and Market Operations



Phase II Basic Parameters

Reduction Period: 2007-2010

Reduction Commitment:

- Phase I Members continuing in Phase II must reduce by an additional 2% by 2010.
- New Phase II Members must reduce by 6% by 2010.

End Result: All Members will have achieved 6% reductions by 2010.




CCX Registry

You are logged in as nclarkccx
Logout

Select Organization: CHICAGO CLIMATE EXCHANGE
Registry Position Summary Page v1.0.6

- CCX View Only Company
- Organization Summary
- Positions Summary
- Transaction History
- Emissions Summary
- Admin



Chicago Climate Exchange Position Statement
Organization: CCX View Only Company
as of

Direct Emission Baseline: 0
metric tons CO2 equivalent (unaudited)

1. Total holdings of CCX Carbon Financial Instruments

(Exchange Allowances plus Offsets plus Early Action Credits, in hundred metric tons CO2)

Vintage:	2003	2004	2005	2006
Total CFI Holdings:	0	0	0	0

2. Exchange Allowance holdings

		Vintage:	2003	2004	2005	2006
Original Allocation of Exchange Allowances:			0	0	0	0
Item	Action					
1% auction pool withholding	debit		0	0	0	0
bought in sept 2003 auction	credit		0	0	0	0
current holdings			0	0	0	0

3. Exchange Offset holdings

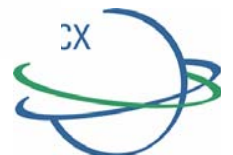
		Vintage:	2003	2004	2005	2006
Holdings of exchange offsets			0	0	0	0

4. Exchange Early Action Credit holdings

		Vintage:	2003	2004	2005	2006
Holdings of Exchange Early Action Credits:			0	0	0	0

All Carbon Financial Instrument quantities are rounded to the nearest hundred metric tons CO2

CHICAGO CLIMATE EXCHANGE, INC.



CCX Market Screen

ChicagoClimateExchange - mstern_ccx @ CCX View Only Company

View Admin Help Logout

Kill All Activate All Live Only Hold Bids Hold All Hold Offers

Orders Deals Greenhouse Gases

Strip	+	-	Sell	Qty	Bid	Offer	Qty	Buy	High	Low	Last	WAP	Volume	+	-
Vintage 2003	+	-		100	1.17	1.24	20		1.17	1.10	1.17	1.15	125	+	-
				100	1.16	1.25	100				1.15				
				50	1.14						1.13				
				10	1.11						1.10				
				100	1.10										
Vintage 2004		-		50	1.17	1.23	20		1.18	1.15	1.18	1.17	100		-
				100	1.17	1.25	50				1.17				
				20	1.15						1.16				
				100	1.12						1.15				
Vintage 2005	+	-		100	1.17	1.23	20		1.19	1.17	1.17	1.17	435	+	-
				100	1.16	1.25	50				1.19				
				20	0.95						1.17				
											1.17				
											1.17				
Vintage 2006	+	-		100	1.17	1.24	10		1.19	1.16	1.17	1.18	351	+	-
				50	1.16						1.19				
				100	1.14						1.18				
											1.17				
											1.17				

Completed trades (each contract is 100mt CO₂):

- CCX CFI - Carbon Financial Instrument - Vintage 2006, 100 @ 1.17 (Oct 04, 2004 11:56:00 CDT) <<BLOCK>>
- CCX CFI - Carbon Financial Instrument - Vintage 2005, 100 @ 1.17 (Oct 04, 2004 11:55:00 CDT) <<BLOCK>>
- CCX CFI - Carbon Financial Instrument - Vintage 2005, 100 @ 1.19 (Oct 04, 2004 10:54:37 CDT)
- CCX CFI - Carbon Financial Instrument - Vintage 2006, 100 @ 1.19 (Oct 04, 2004 10:53:18 CDT)
- CCX CFI - Carbon Financial Instrument - Vintage 2006, 1 @ 1.18 (Oct 04, 2004 10:24:48 CDT)
- CCX CFI - Carbon Financial Instrument - Vintage 2004, 20 @ 1.18 (Oct 04, 2004 10:17:23 CDT)
- CCX CFI - Carbon Financial Instrument - Vintage 2004, 20 @ 1.17 (Oct 04, 2004 10:14:24 CDT)
- CCX CFI - Carbon Financial Instrument - Vintage 2003, 10 @ 1.17 (Oct 04, 2004 10:14:21 CDT)
- CCX CFI - Carbon Financial Instrument - Vintage 2006, 20 @ 1.17 (Oct 04, 2004 10:13:40 CDT)
- CCX CFI - Carbon Financial Instrument - Vintage 2006, 100 @ 1.17 (Oct 04, 2004 10:13:07 CDT)
- CCX CFI - Carbon Financial Instrument - Vintage 2006, 20 @ 1.17 (Oct 04, 2004 10:13:07 CDT)
- CCX CFI - Carbon Financial Instrument - Vintage 2005, 100 @ 1.17 (Oct 04, 2004 10:12:41 CDT)
- CCX CFI - Carbon Financial Instrument - Vintage 2004, 50 @ 1.16 (Oct 04, 2004 10:12:20 CDT)
- CCX CFI - Carbon Financial Instrument - Vintage 2005, 100 @ 1.17 (Oct 04, 2004 10:12:06 CDT)

12:28:53 CDT

bids and offers

completed trades
(each contract is 100mt CO₂)



Scale of CCX Thus Far

- CCX total emissions baseline of 226 million metric tons CO_{2e} is equivalent to the United Kingdom's annual allocation under the EU trading system and would make CCX one of the largest "countries" in the EU CO₂ market.
- CCX total emissions baseline thus far is equivalent to 4% of the United States annual GHG emissions.
- Total reductions thus far in the CCX program are roughly equal to 1/3 the annual emissions of Norway.



Early Results and Achievements

- Complete operation implemented: rulebook, trading, clearing, registry, market oversight, governance
- Trading working well:
 - >700 trades (>3 million tons)
 - Prices range from under \$1/ton to over \$2/ton
- Methane and agriculture soil offsets verified, issued and sold



Early Results and Achievements (cont.)

- Major pool of private and public sector talent engaged
 - Members
 - Other Experts
- Thousands of individuals in a variety of sectors more informed on carbon management and trading
- CCX framework is synergistic and complementary to all policy options and precludes no other reduction or registry initiatives--local, regional, state or Federal



Conclusions: Big Picture Results From CCX

- Carbon now has an initial price in a rules-based program in the world's largest economy
- North American entities with verifiable GHG emission reductions can now receive revenue for that environmental service
- Entities that do not incorporate carbon prices in their decisions risk major mistakes



Benefits for CCX Members

Members gain unique experience and ability to:

- Trade emissions allowances and understand GHG emissions allowance trading—valuable for all climate change policy
- Capture gains and understand risks in carbon market
- Drive policy developments based on experience
- Demonstrate strategic vision on climate change issues to shareholders, rating agencies, citizens, customers, clients
- Measure and verify emissions profile
- Weigh options for reduction and mitigation holistically
- Gain leadership recognition for taking early credible binding action
- Be ready for global trading activities as international policies evolve



Views on CCX

CCX represents an innovative market-based approach to solving our energy issues and improving air quality.

Chicago Mayor Richard M. Daley (Chicago, September 30, 2003)

That's why programs like Chicago's -- and others in development across the country -- are so important. Some environmental groups criticize CCX, saying it's no substitute for a mandatory federal program. But in reality the exchange will help ease the transition to a nationwide cap-and-trade system by establishing a viable regional market for carbon transactions. The CCX program looks to be a winner for Chicago, businesses, farmers, and the environment. Other locales and financial centers would be wise to follow its example.

U.S. Senator Tom Carper, (D- Delaware) (November 20, 2003)

...You could help to create the conditions for efficient emission trading systems, standardized accounting methods and the like. The successful launch of the Chicago Climate Exchange here in the United States is one example of an initiative to create a carbon market. We need more such innovative thinking on financing mechanisms and new insurance products.

United Nations Secretary-General Kofi Annan (November 21, 2003)



Views on CCX

It's cold in Chicago today, but I'm thrilled to see that the new Chicago Climate Exchange is warming up for the next wave in environmental protection—and economic innovation. I want to congratulate the Exchange, which is the first comprehensive voluntary pilot program for domestic trading of greenhouse gases, on the announcement of its founding members. Their progress is great news for Chicago's economy and for America's environment.

US Senator Joseph Lieberman (D-CT)

As CCX approaches its first anniversary of continuous trading, it is apparent that members are raising their understanding of market-based carbon emissions management through hands-on experience. Through participation in CCX members are able to develop best practices that allow the activities of emissions data gathering, auditing, and trading to become simplified and standardized.

Gov. Christie Todd Whitman, former Governor of New Jersey

We are joining the Chicago Climate Exchange for two reasons. We want to strengthen a pioneering effort to create market-based solutions to the problem of climate change, and CCX helps us maintain our own organizational commitment to keep our net carbon dioxide emissions at zero.

Jonathan Lash, President, World Resources Institute (September 25, 2003)

