

CITY OF OAKLAND
COUNCIL AGENDA REPORT

FILED
OFFICE OF THE CITY CLERK
OAKLAND
2005 MAR 17 PM 1:00

TO: Office of the City Administrator
ATTN: Deborah Edgerly
FROM: Office of City Councilmember Jane Brunner
DATE: March 22, 2005

RE: Report Authorizing the Oakland City Administrator to Establish Membership in the Chicago Climate Exchange (A Market For Reducing And Trading Greenhouse Gas Emissions) for the City of Oakland, and to Expend the Funds Necessary to Initiate and Maintain Such Membership and the Cost Of Trading Emissions, not to Exceed \$10,000 Without Returning to Council for Approval.

SUMMARY

Global climate change is an important problem facing our planet which will require the combined and coordinated efforts of individuals, cities, states and countries to solve or mitigate. Despite the overwhelming nature of the problem, the City of Oakland has taken many important steps to reduce the emissions which are responsible for global climate change, known as "greenhouse gases" (GHGs).

This report recommends that the City take one more important step forward in our commitment to GHGs by joining the Chicago Climate Exchange (CCX). The CCX is the nation's first voluntary but legally binding system to reduce carbon dioxide emissions through a verified, credible process. Members agree to reduce their emissions 1% per year from 2003 through 2006, below their baseline average (1998-2001) and members who exceed this reduction earn GHG "credits", officially termed "emission allowances," and may sell these allowances on the exchange. Members who fail to reduce their emissions must purchase allowances on the exchange. This agreement has the potential to bring additional revenue into the City if the City continues to reduce emissions as it has in the past. This report authorizes funding of up to \$10,000 to be used only in the worst case scenario if the City fails to reduce emissions and is forced to buy credits on the market.

This report authorizes the City Administrator to move forward with membership in the Chicago Climate Exchange for the City of Oakland. City of Oakland Membership means the City will commit to GHG emissions reductions from all entities for which the City government is responsible including City-owned buildings and vehicles (this does not include private businesses, residences, etc...). If the City meets and exceeds the reduction goals, it will have allowances to sell in the Exchange. If it does not meet these goals, it will have to purchase GHG reduction allowances from others in the Exchange.

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Should the Council choose to move forward with membership in the CCX, the City of Oakland will be the first city in California to join the CCX and only the second city in the country after the City of Chicago, where the Exchange is located.

FISCAL IMPACT

Membership in the Chicago Climate Exchange represents a contractual obligation on the part of the City. Members of the CCX agree to "cap" their emissions and reduce them by 1% annually for the 4 years of Phase I of the Exchange. (Members may opt to

discontinue Membership after Phase I, or continue for additional phases as these are announced.). Members whose reductions exceed the required 1% are entitled to "trade" reduction allowances on the CCX market. Members whose reductions failed to meet the required 1% are required to purchase allowances on the market. (An economic growth provision limits the maximum purchase liability of Members). Also, given the City of Oakland's emissions trends, projections and baseline data, CCX has estimated that the City's sell/buy range would be roughly \$10K over four years. This means that as a seller, the City might earn \$10K as revenue over 4 years, or buy allowances in this amount. Currently, the market is trading at a price of approximately \$1.75 per Metric Ton. In 2003, the City would have been a seller of allowances and the City expects its reduction trends to continue.

Additionally, there is a \$1,000 fee to become a member of the CCX and an annual fee of \$1,000 which pays for independent review of the City's emissions reductions, which will provide high value to the City in the form of enhanced understanding of its energy flows and use patterns. CCX has said that it could arrange for a deferred structure of payment of these fees. Passage of this resolution would authorize the City Administrator to arrange for Membership and expend the funds necessary to initiate and maintain the membership.

City of Oakland operations currently produce roughly 40,000 metric tons (44,101 US tons) of greenhouse gas emissions per year. If City operations emit the same amount next year as we did this year, (and therefore fails to reduce our GHG pollution by the required 1%) we would have to purchase allowances equal to 1,000 metric tons of greenhouse gas emissions. At the current price of \$1.75/ton the City would be responsible to pay \$1,750. If the price per ton of emissions allowances on the market were to double, then the City would be responsible to pay \$3,500.

However, the charter (Chicago Accord) of the Exchange includes an "economic growth provision" that limits the amount of allowances each Member must buy each year. For example, at today's prices, maximum purchase in 2006 could not exceed 2800 metric tons or \$4900. Future prices can't be predicted but as a Member, the City's risk exposure is strictly limited. The Exchange included the economic growth provision since it is a pilot program that also aims at helping members develop emissions management and trading expertise and so that potential members could gauge their potential buy-risk, at least based on current prices.

However, had the City been a Member of the Exchange last year, the above "buy" scenario would not apply and the opposite would have happened. Rather than buy

allowances, we would have been able to sell them. This money could have reduced or even eliminated our membership fees for the year. Given the steps that the City is taking to reduce greenhouse gases, the more likely scenario is that we will be selling allowances, or "credits" on the market.

BACKGROUND

In 1998, the City Council established a policy and goal of achieving 15% reduction of green house gases (GHG) by 2010. In 1998, with help from the US office of the International Council on Local Environmental Initiatives (ICLEI), Oakland established an emissions baseline set for 1990 that highlighted that Oakland as a whole (including private businesses and residents) was emitting about 2 million tons of green house gases per year. The City of Oakland has initiated and completed a number of projects that have proven our ability to reduce GHGs.

During the past two years, 56 City buildings have received energy efficiency improvements, with avoided costs estimated at \$130,000/year. Since 1990, energy efficiency engineering, upgrades and retrofits have reduced energy consumption in City-owned facilities by approximately 19%. These efforts save approximately \$1 million each year in City operations and maintenance, cut approximately 9 million kilowatt hours of energy use, and has resulted in the reduction of about 3,500 tons of pollution. During that same time period, the greater Oakland community has reduced its energy use by over 17 million kilowatt hours per year, resulting in a savings of nearly \$2 ½ million in energy costs annually.

The Chicago Climate Exchange is significant in scale, size, scope, impact and history. It is the world's first multi-national and multi-sectoral market for reducing greenhouse gases and trading greenhouse gas emissions allowances. The goal of trading is to achieve actual reductions in emissions levels via the most cost-effective means. Since greenhouse gases enter the global atmosphere from wherever they are emitted, reductions can occur anywhere and still have a benefit for the global atmosphere. And since every entity that uses fossil fuels causes emissions to occur, every entity should seek to make real reductions. The principle of "cap-and-trade" has been proven to be highly effective in reducing sulfur dioxide pollution that causes acid rain, as well as highly cost effective.

CCX, which has had experience with the sulfur dioxide trading program, has pioneered the cap-and-trade concept for greenhouse gases.

Despite the worldwide adoption of the Kyoto Protocol on Climate Change on February 16, 2005, in our nation there is still no mandatory requirement to do anything about CO2 and greenhouse gas reduction at this time. In contrast the European Union has adopted the Kyoto Protocol on Climate Change and emissions trading such as that on the Chicago Climate Exchange has begun in Europe among EU members. (CCX also operates an Exchange in Europe, known as the European Climate Exchange, or ECX).

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CCX Membership is our nation's only existing requirement with any teeth, in that the CCX commitment is a legally binding contract. The CCX currently has more than 70

active members including the City of Chicago, IBM, Dupont, Tufts University, and Waste Management, Inc.

Since the Exchange officially began trading in 2003, over 2 million metric tons of emissions have been traded. CCX members are diverse in size and sector, but the total emissions baseline is significant, and therefore the reductions achieved are also significant. As we know, the U.S. is the world's leading source of greenhouse gas

emissions. So, it is important for emitters in the U.S. to make reductions. For example, currently, CCX members produce more greenhouse gas emissions than all the emitters capped under the UK's participation in the European Union trading program through the Kyoto Protocol. By meeting and exceeding the CCX reduction cap targets, the 70 existing members of the Exchange have already reduced the amount of greenhouse gases in the global atmosphere roughly equivalent to half of total emissions produced annually by all emitters in either Norway or Ireland.

The Chicago Climate Exchange demonstrates that a cross-section of U.S. industry and local governments can reach agreement to reduce greenhouse gases using a market-based emission reduction program. The success of the Exchange sends a signal to the U.S. Government that the goal and mechanisms of the Kyoto protocol are within reach for our country.

KEY ISSUES AND IMPACTS

Benefits to the City of Oakland

Based on an initial review of City emissions data from the last three years the following are some of the key benefits of membership:

- Achievement of real emissions reductions, verified, and transparent
- Vital "leading by example" evidence by City to other entities from which City seeks energy reduction and compliance with sustainability goals
- Revenue possible from seller position
- Valuable high-level experience upon which all other City sustainability/energy efficiency initiatives can build, including interest in further investments in solar power, major energy transition, fuel switching, energy data management, and longer term Kyoto Protocol reduction targets City-wide
- Virtually cost-free technical and human capacity building and understanding of emissions management and emissions trading among City staff, leaders and others
- All other benefits associated with "first mover advantage"

Projected Costs to City of Membership

Costs: As stated above, given the City's emissions trends data, we would conservatively estimate plus/minus risk/gain potential to be \$10K either way, over the full 4 year CCX

Membership period. In addition, CCX Membership fees would be \$1K/year for each of 4 years, plus \$1K entry membership fee. All Membership fees, however, can be structured so as not to present an impediment. Also, the City could choose to retire credits earned, in which case there is obviously no sale revenue.

DISABILITY ISSUES AND SENIOR CITIZEN ACCESS:

The information in this report will have no impact on persons with disabilities or senior citizens.

CONCLUSION:

Global warming is a global threat of great magnitude. By joining CCX, we are joining a global family to address a global problem. Taking part in Chicago Climate Exchange's "cap and trade" system is a responsible way for local governments to track and reduce emissions which are harmful to the environment and our community. By becoming a member of the Chicago Climate Exchange, The City of Oakland will continue its national leadership in sustainability and send a signal to the Federal Government. The City will also realize the tangible benefit of efficient energy use in all its facilities, as well as learning about how to maximize greenhouse gas reductions throughout City operations. This knowledge will be of significant value to the City as it will help the City choose the most efficient, cost-effective and environmentally beneficial options.

RECOMMENDATIONS:

It is the recommendation of this report that the City of Oakland become a Member of the Chicago Climate Exchange and that the City Council authorizes the City Administrator to take all steps necessary for membership.

Respectfully Submitted,



Jane Brunner,
Vice Mayor

Prepared by:
Zachary Wald

Deborah Edgerly
March 22, 2005

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City Council Aide

Approved by:
Randy Hayes
Director of Sustainability

**APPROVED AND FORWARDED TO THE
CITY COUNCIL**

Office of the City Administrator.

FILED
OFFICE OF THE CITY CLERK
OAKLAND

05 MAR 17 PM 4:23

OAKLAND CITY COUNCIL

RESOLUTION No. _____ C.M.S.

INTRODUCED BY COUNCILMEMBER JANE BRUNNER

REVISED
MAR 17 2005



RESOLUTION AUTHORIZING THE OAKLAND CITY ADMINISTRATOR TO ESTABLISH MEMBERSHIP IN THE CHICAGO CLIMATE EXCHANGE (A MARKET FOR REDUCING AND TRADING GREENHOUSE GAS EMISSIONS) FOR THE CITY OF OAKLAND, AND TO EXPEND THE FUNDS NECESSARY TO INITIATE AND MAINTAIN SUCH MEMBERSHIP AND THE COST OF TRADING EMISSIONS, NOT TO EXCEED \$10,000 WITHOUT RETURNING TO COUNCIL FOR APPROVAL.

WHEREAS, the City of Oakland, through the management of its facilities and operations, is committed to leadership in sustainability for the benefit of the planet and of the citizens of Oakland; and

WHEREAS, in 1998, the City Council established a policy and goal of achieving a 15% reduction of green house gases from City facilities and operations by the year 2010; and

WHEREAS, energy efficiency engineering, upgrades and retrofits have reduced energy consumption in City-owned facilities by approximately 19%, saving the City money and reducing pollution; and

WHEREAS, The Chicago Climate Exchange, established in 2003, is a national platform for demonstrating the commitment of over 70 private and public sector entities, including cities, to reduce green house gas emissions; and

WHEREAS, membership in the Chicago Climate Exchange commits the City of Oakland to reduce greenhouse gas emissions from its facilities and operations in accordance with the terms of the Chicago Accord, for the period 2003-2006; now

WHEREAS, as a member of the Exchange the City will be entitled to buy and sell emissions in the Chicago Climate Exchange market. If the City reduces its green house gas emissions beyond 1% annually, the City will be able to sell emissions allowances on the Exchange, which will bring revenue into the City. Funding of \$10,000 is available to be used for purchasing emissions credits only in the event that the City fails to reduce its emissions; now

THEREFORE, BE IT RESOLVED that the Oakland City Council authorizes the Oakland City Administrator to establish membership in the Chicago Climate Exchange for the City of Oakland, and to expend the funds necessary to initiate and maintain such membership and the cost of trading emissions, not to exceed \$10,000 without returning to council for approval.

IN COUNCIL, OAKLAND, CALIFORNIA, MARCH 22, 2005

PASSED BY THE FOLLOWING VOTE:

AYES- BROOKS, BRUNNER, CHANG, NADEL, QUAN, REID, AND
PRESIDENT DE LA FUENTE

NOES-

ABSENT-

ABSTENTION-

ATTEST:

LATONDA SIMMONS
Interim City Clerk and Clerk of the Council
of the City of Oakland, California