

## **MEMORANDUM**

**DATE:** November 18, 2008

**TO:** Patrick D. O’Keeffe, City Manager

**FROM:** Department of Public Works

**SUBJECT:** Resolution of the City Council of the City of Emeryville Approving and Adopting the City of Emeryville Climate Action Plan.

### **SUMMARY**

The purpose of this item is to consider the proposed City of Emeryville Climate Action Plan. The Plan is recommended by the Climate Change Task Force (CCTF) and is estimated to achieve the City of Emeryville’s goal of reducing greenhouse gas emissions by 25% over 2004 levels by 2020.

### **BACKGROUND**

#### **State, National and International Background And Commitments**

In February 2005, the world took a global step forward towards reducing green house emissions when 141 countries strengthened their countries’ current environmental laws by adopting the Kyoto Treaty, the international agreement to address climate disruption. As of May 2008, 181 countries have ratified the agreement representing over 61% of the developed countries emissions. The Kyoto Treaty sets binding legal commitments on participating countries to reduce emissions an average of 5.2% below 1990 levels. If the United States of America had ratified the Kyoto Treaty, we would have been required to reduce greenhouse gas emissions by 7% below 1990 levels by 2012.

In 2005, cities and counties took the lead at the U.S. Conference of Mayor’s developed the U.S. Mayors Climate Protection Agreement which urged the federal and state governments to enact policies and programs to meet the Kyoto Protocol target. The Agreement included a commitment to strive to meet the Kyoto Protocol target by taking local actions, such as conducting a baseline emissions inventory, setting reduction targets, and creating a climate action plan.

In September 2006, the State of California enacted AB 32, the Global Warming Act of 2006, which creates a statewide greenhouse gas emission limit that would reduce statewide emissions to 1990 levels by 2020. Reaching this target necessitates a reduction in greenhouse gas emissions by approximately 25-30% below the level of emissions that the State is forecasted to reach by 2020. It is not yet clear what measures the State plans to enact to achieve this reduction goal, but it is clear that the State will be looking to local governments for assistance. Hopefully, this will equate to financial assistance and other resources and incentives for local governments to implement emissions reduction programs.

Recent studies continue to reveal the impact humans have on their environment and that a change in human behavior is necessary.

- January of 2007, the International Committee on Climate Change found a certainty level of 90% that climate change is happening and is being caused by human action.
- February of 2007, The Stern Review, a report for the British Government, found that one percent of global gross domestic product (GDP) *per annum* is required to be invested in order to avoid the worst effects of climate change, and that failure to do so could risk global GDP being up to twenty percent lower than it otherwise might be.
- April of 2007, the US Supreme Court found that the EPA must regulate CO<sub>2</sub> as an air pollutant.

### Local City of Emeryville Background and Commitments

The City of Emeryville has taken several actions concerning Climate Change over the last few years:

On September 7 1999, Council Member Harper asked and received the blessing of the Emeryville City Council to give signatory approval of the “Mayor and Local Official Statement on Global Warming” through the organization “Cities for Climate Protection.”

On June 5, 2005, in San Francisco at the United Nations World Environment Day proceedings, Emeryville signed as a charter member of the United Nations World Environmental Accords - the smallest city by population in the world to do so. The Accords ask the participating jurisdictions to take one of the 21 action steps each year; the Cities will be evaluated on their voluntary actions in 2012 by the United Nations at a follow-up conference. One of the key action steps of the Accords is to set a goal of reducing green house gas emissions by 25% by 2030 and developing a system to track Greenhouse Gas (GHG) emissions.

In May 2006, the City adopted a Resolution to participate in the Alameda County Climate Protection Project, an effort that now includes all the cities in the County.

On February 28, 2007, the first meeting of the CCTF was held. The Task Force discussed the next phases of the project and made recommendations for the goal and expansion of the Task Force membership.

The Alameda County Climate Protection Project builds upon the “Cities for Climate Protection Campaign” from the International Council for Local Environmental Initiatives – Cities for Sustainability (ICLEI) and their 5-Milestone methodology to reduce both greenhouse gas and air pollution emissions. The 5-Milestone process that the City has committed to implement is as follows:

Milestone 1 – Conduct a baseline emissions inventory and forecast

Milestone 2 – Adopt an emissions reduction target

Milestone 3 – Develop a Climate Action Plan (CAP) for reducing emissions

Milestone 4 – Implement policies and measures

## Milestone 5 – Monitor and verify results

The City has completed the first two milestones as discussed below in the background section. The third milestone is the subject of this agenda item.

### Milestone 1 - Baseline Emission Inventory and Forecast Report

The purpose of the baseline emissions inventory is to determine the levels of greenhouse gas emissions that the City of Emeryville emitted in its base year, 2004, on a government level and on a community-wide level.

In December of 2006, The City and ICLEI completed the 2004 community-wide and government operations baseline greenhouse emissions inventory. Emissions were aggregated and measured in terms of equivalent carbon dioxide units or eCO<sub>2</sub> so that different greenhouse gases were considered in comparable terms. According to that first inventory, Community-wide, the City emitted approximately 128,918 tons of eCO<sub>2</sub>. Government operations, which emitted approximately 1,283 tons, were responsible for approximately 1% of the overall eCO<sub>2</sub> production. Based upon the information contained in the inventory report from ICLEI, the City Council formed the City's Climate Change Task Force and appointed to the task force, Councilmembers Atkin and Davis.

In the summer of 2008, ICLEI proposed a modification to the baseline inventories for all member agencies. Transportation emissions were recalculated to take into account a new methodology for measuring highway related emissions that were not included in the previous inventories. The result of the recalculation was an increase in Emeryville's total emissions. However, the recalculation also brings Emeryville in-line with the county average for transportation related emissions. ICLEI and the CCTF are recommending the use of the new revised inventory as it is the new standard method for all the jurisdictions in Alameda County. The following tables summarize the new revised inventories for the Community and the Government sectors:

### **Community-wide Emissions Inventory Summary – 2004 – (Revised 2008)**

<b>2004 Community Emissions by Sector</b>	<b>Residential</b>	<b>Commercial/ Industrial</b>	<b>Transportation</b>	<b>Waste</b>	<b>TOTAL</b>
<b>CO<sub>2</sub>e (metric tons)</b>	9,380	76,204	87,447	5,801	178,832
<b>% of Total CO<sub>2</sub>e</b>	5.2%	42.6%	48.9%	3.2%	100.0%
<b>Energy Use (MMBtu)</b>	160,562	1,267,105	262,451	0	1,690,118

### **Government Emissions Inventory Summary - 2004 – (Revised 2008)**

<b>2004 Government Emissions by Sector</b>	<b>Buildings</b>	<b>Vehicle Fleet</b>	<b>Public Lighting</b>	<b>Water/ Sewage</b>	<b>Waste</b>	<b>TOTAL</b>
<b>CO<sub>2</sub>e (metric tons)</b>	395	444	271	13	212	1,335
<b>% of Total CO<sub>2</sub>e</b>	29.6%	33.3%	20.3%	1.0%	15.9%	100.0%
<b>MMBtu</b>	6,633	5,713	4,137	195	-	16,678
<b>Cost (\$) per year</b>	\$169,608	\$118,974	\$136,974	\$7,801	-	\$433,357

In order to create a historical record of the City's emissions trend, it is necessary to conduct subsequent emissions inventories on a regular basis. Staff recommends that a new inventory be conducted in 2010 to track progress made.

#### Milestone 2 – Adopt an Emissions Reduction Target

The City Council completed Milestone 2 by establishing the emissions reduction goal in May of 2007. The goal set by the City is to reduce emission levels by 25% over 2004 levels by the year 2020 in two areas: the community as a whole and for government operations.

### **DISCUSSION / ANALYSIS**

#### Milestone 3 – Develop a Climate Action Plan (CAP) for reducing emissions

The CCTF had meetings in June, August, October of 2007 and January, March, May, June and July of 2008. During the last meeting in 2008 the draft plan was completed and recommended for adoption. The CAP is now being presented to the City Council for consideration.

The City will partner with other organizations that have committed to reducing greenhouse gas emissions. For example, the BAAQMD at their annual summit on November 10, 2006 allocated \$3 million to fund emissions reduction programs. Additionally, ABAG, in partnership with PG&E, is offering an energy watch program for communities and local governments which the City has participated in and can expand upon.

ICLEI, in partnership with Stopwaste.org, developed an Action Plan Template which includes a list of emissions reduction programs that the CCTF considered for the draft plan. The more detailed draft plan is attached and the measures are summarized as follows:

#### Community-Wide

Increase Transit Oriented Development  
Adopt a Green Building and Bay-Friendly Ordinance  
Enhance Transportation Demand Management Conditions  
New Pedestrian, Cycling and Transit Programs & Incentives  
Increase Transit Service and Ridership  
Commercial and Residential Energy Conservation Ordinances  
Develop and Incentivize Local Renewable Energy Production  
Conserve Potable Water and Develop Rainwater Usage  
Reduce 2004 Landfilled Waste Tons by 50% by 2020

#### Affected Sector

New Development Projects  
New Development Projects  
New Development Projects  
All Sectors  
All Sectors  
Existing Buildings & Homes  
All Sectors  
All Sectors  
All Sectors

#### Government Operations

Green Building and Bay-Friendly Landscaping for City buildings and landscapes  
Fleet changes – fuel and vehicle types  
Reduce 2004 Landfilled Waste Tons by 50% by 2020  
Environmentally Preferable Purchasing  
Alternative Transportation Incentives/Initiatives

## **FISCAL IMPACT**

The Fiscal impact to the City is unknown at this time. To implement the plan there will be costs and savings that will vary for each action taken. Some actions may have upfront capital costs, or need additional staff time to implement and maintain. Funding will be needed for incentives to businesses or residents and informational campaigns to promote new programs. There are various sources of possible revenues for these expenses such as grants and fees. A better financial analysis will be developed upon future task prioritization.

## **RECOMMENDATION**

Staff and the Climate Change Task Force recommend that the City Council consider the attached draft resolution adopting and approving the Climate Action Plan for the City and provide comments.

## **RECOMMENDED BY:**

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Maurice Kaufman  
Director of Public Works

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Peter Schultze-Allen  
Environmental Analyst

## **APPROVED FOR FORWARDING TO THE CITY COUNCIL**

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Patrick D. O’Keeffe,  
City Manager

attachments: Resolution  
Draft Climate Action Plan  
2004 Baseline Inventory (revised in 2008)