AGENDA BILL

Agenda Item No.

Date: February 22, 2011

To: El Cerrito City Council

From: Maria Sanders, Environmental Analyst
Melanie Mintz, Environmental Services Division Manager
Karen Pinkos, Assistant City Manager

Subject: Greenhouse Gas Emissions Reduction Targets in the El Cerrito Climate Action Plan

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ACTIONS REQUESTED

Adopt greenhouse gas emissions reduction targets of 15% below 2005 levels by the year 2020 and 30% below 2005 levels by 2035 for both municipal operations and the El Cerrito community as a part of the El Cerrito Climate Action Plan.

BACKGROUND

Since 2006, the El Cerrito City Council has consistently supported local, regional and state initiatives to cut the pollution that causes global warming and climate change. The following Council resolutions laid the groundwork for developing a Climate Action Plan (CAP):

- Resolution 2006-61 endorsed the U.S. Mayors Climate Protection Agreement, in which local governments agree to take greenhouse gas (GHG) reduction measures, including the development of a Climate Action Plan.
- Resolution 2006-93 endorsed the reduction targets of the California Global Warming Solutions Act (AB 32).

In addition to providing leadership in mitigating the pollution that contributes to climate change, development of a CAP helps prepare El Cerrito for a quickly evolving legislative framework set by the State as part of its implementation of AB 32.

For the past year, Environmental Services Division staff has been preparing a Climate Action Plan. The purpose of the CAP is to provide a roadmap for the City in pursuing both community-wide and municipal reductions in GHG emissions. Development of the CAP is based on a methodology advanced by ICLEI Local Governments for Sustainability and further refined by the Bay Area Air Quality Management District (BAAQMD). This methodology investigates the potential of reducing local GHG emissions from transportation, energy consumption, water use, and waste generation at the local level by:

- Establishing a baseline inventory of emissions from these activities

- Setting a percentage reduction target in comparison to the baseline inventory
- Outlining the potential of reducing annual GHG emissions through existing and proposed policies, programs, and projects that can be enacted by the City
- Implementing the Plan and monitoring the results through subsequent inventories and adjustments

El Cerrito's planning process has been informed by input from city staff and from the public via an on-line survey, three public workshops, and at meetings of the Environmental Quality Committee. Additional comments from the public will be solicited in late spring of 2011 prior to the plan being brought to City Council for adoption. On February 8th, 2011 the Environmental Quality Committee heard a staff report on the reduction targets discussed in this report and unanimously recommended that the City Council adopt these targets.

DISCUSSION

As part of the planning process for its Climate Action Plan, ESD staff is utilizing 2005 as the baseline year, and 2020 and 2035 as the 1st and 2nd target years for achieving reductions. The 2005 target was chosen as part of a larger effort by ICLEI to do emissions inventories for cities in Contra Costa County. The 2020 target year corresponds with goals set forth in the AB 32 Scoping Plan. The 2035 target date is consistent with other state and regional climate-related planning efforts currently underway (such as the Sustainable Communities Strategy under SB 375).

The AB 32 Scoping Plan recommends that local governments reduce emissions by 15% below baseline emissions by 2020. Subsequently, BAAQMD established new CEQA thresholds for GHG emissions based on the AB 32 recommended goal. Per BAAQMD, a Climate Action Plan that is consistent with AB 32 reduction targets could also be used to provide guidance for development projects seeking to streamline CEQA GHG analysis and/or mitigate GHG emissions. Given the precedent of the recommended reduction target, City staff has used it as a benchmark during the planning process to gage how aggressive El Cerrito's CAP would need to be in order to meet the State recommendation.

El Cerrito's Baseline Emissions

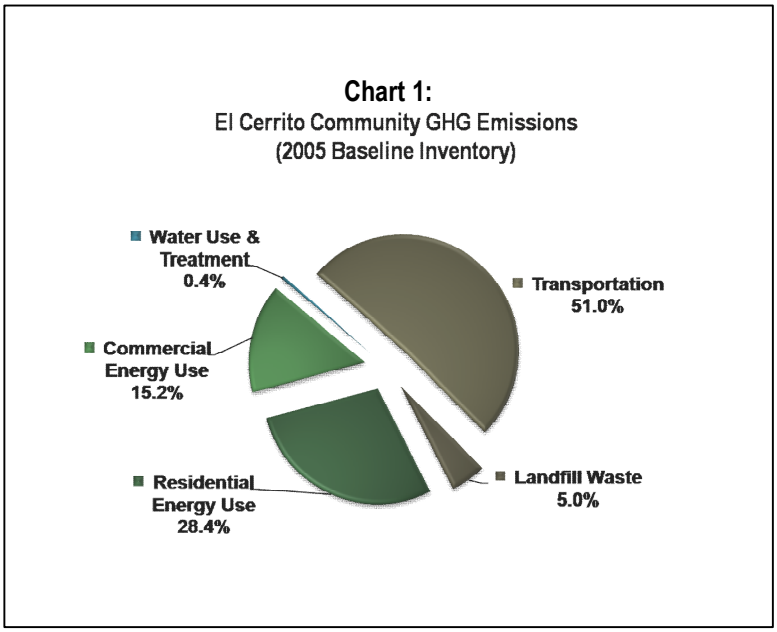
In 2008, the City developed an inventory of both community-wide and municipal sources of GHG emissions, using 2005 as the baseline year. This inventory was updated in 2010 to reflect new guidelines established by BAAQMD for counting emissions. While the inventory does not include all emissions that could be attributed to El Cerrito residents and businesses, it does provide a replicable snapshot of GHG emissions that can be reasonably and reliably measured over time and over which local government has some type of influence.

These activities fall into the following categories:

- Energy and water use by residents, businesses, institutions, and governmental agencies
- Vehicle miles travelled on El Cerrito's streets

- The percent of vehicle miles travelled on County highways attributable to El Cerrito's residents, employees, businesses, institutions and governmental agencies
- Tons of waste sent to landfills

Chart 1, *El Cerrito Community GHG Emissions,* represents the City's community-wide GHG emissions and the percent contribution from each activity source. At 51%, emissions from vehicle traffic constitute the single largest source of emissions in El Cerrito. At nearly 44%, energy consumption is the second largest source, with residential energy use being almost twice as much as commercial energy use. Emissions associated with the decomposition of waste from El Cerrito in landfills constitute 5%. Finally, water use and waste water treatment (as measured by the amount of energy used per gallon of water conveyed and treated) comprise less than one percent of emissions.



Forecasted Growth in Emissions – Business-As-Usual

Projecting how emissions will grow over time is necessary in order to measure the amount of emissions El Cerrito will need to reduce by 2020 and 2035 if the City and the community were to meet the recommended goal. Growth in El Cerrito's GHG emissions was projected for the years 2020 and 2035 using a "Business-As-Usual" (BAU) trend scenario.

This scenario assumes that, absent any new actions to curb GHG emissions, existing growth rates would be representative of future consumption in energy, water, vehicle use, and waste, which are then multiplied by the projected growth in El Cerrito's population, housing, and workforce. El Cerrito's GHG emissions are projected to increase by nearly 20,000 tons to 166,471 tons in 2020 and yet another 26,000 tons to 192,225 by 2035, as show in Table 1, *Business-As-Usual and Reduction Targets.*

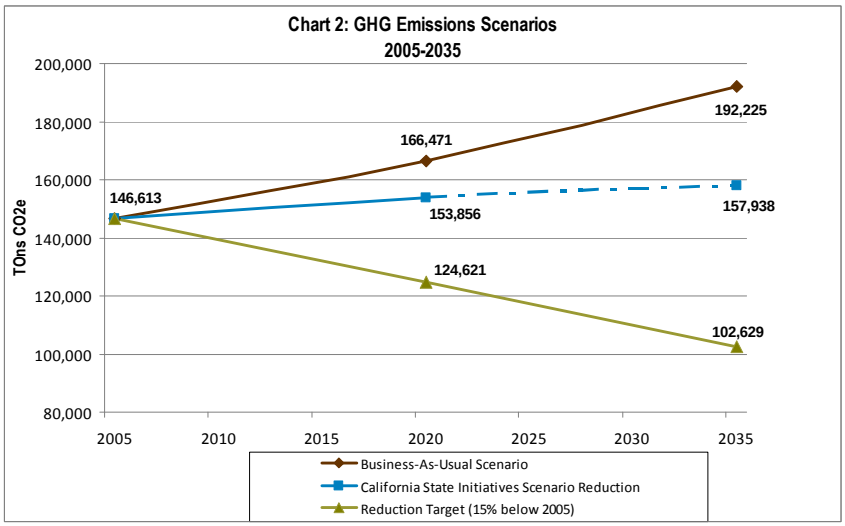
El Cerrito Reduction Targets

Using the state's recommended GHG reduction target of 15% below the baseline year by 2020, El Cerrito would need to reduce its overall emissions to nearly 125,000 tons by 2020. Continuing the trend, 30% below 2005 by 2035 would bring El Cerrito's emissions to a little less than 103,000 tons per year.

Because the State of California has several initiatives that would significantly help reduce GHG emissions at the local level, El Cerrito will not be shouldering the entire burden of achieving these reductions by itself. California's Renewable Power, Low Carbon Fuel, and Vehicle Efficiency standards will help decrease the amount of GHG emissions per kilowatt hour used or vehicle mile travelled. These state initiatives are projected to shave approximately 12,600 tons of CO2e off the BAU growth in emissions by 2020 and 34,000 tons by 2035.

Table 1
Business-As-Usual and Reduction Targets

Emissions Reduction Targets	2005	2020	2035
Residents and Employees	27,000	31,210	35,040
Business-As-Usual Emissions	146,613	166,471	192,225
Reduction Targets below 2005	baseline	15%	30%
Tons of CO2e to Reduce	**-**	**41,850**	**89,596**
Reductions from State Initiatives	-	12,614	34,287
Reductions from City Initiatives		29,236	55,309
Total Emissions After Reductions (Tons CO2e)	**146,613**	**124,621**	**102,629**
Per Capita Tons CO2e	5.44	3.99	2.93



As shown in Chart 2, *GHG Emissions Scenarios*, once the state reductions are subtracted from the total growth in emissions, El Cerrito would then need to reduce emissions by a little more than 29,000 tons by 2020 in order to achieve the 15% reduction target. By 2035, El Cerrito would need to reduce emissions by approximately 55,000 tons compared to the BAU in order to continue the annual trend and reduce emissions by 30% by 2035.

ANALYSIS

While staff is still in the process of quantifying potential reduction strategies for inclusion in the CAP, initial quantification results indicate that these reduction targets are both reasonable and ambitious. For example (and for exemplary purposes only), at the household level, the 2020 15% target is equivalent to taking the following actions: insulating the attic, using energy star appliances, driving 19 miles less per week per household member, and participating in the new food scraps composting program. Clearly many households in El Cerrito have already enacted and gone beyond these actions.

In another example, as part of on-going efficiency efforts in its municipal operations, the City has already been able to reduce the equivalent of 9% of its 2005 corporate baseline inventory. Given this trend, staff believes that the City will more than likely be able to exceed a 15% reduction in emissions from municipal operations by 2020.

It will, however, be more challenging to achieve reductions equivalent to these actions across the entire community. Meeting these targets will require a steady decrease in emissions over the next 25 years and will be the result of implementing an array of strategies across all sectors. Strategies will include those that encourage and/or require residents and businesses to take action in the near-term in combination with ones that lay the groundwork for a future that is structurally less dependent on fossil fuels. These strategies include:

- Establishing more compact, higher density, mixed-use infill development along major transportation corridors in order to create more economic diversity, serve the daily needs of residents and employees, and decrease daily vehicle miles travelled
- Creating a transportation infrastructure that invites people to walk, bike and take transit more
- Achieving greater energy efficiency, water efficiency, and renewable energy in existing and new buildings through education, incentives and ordinances
- Decreasing waste going to the landfill through a variety of waste reduction and recycling programs and increasing participation in current programs
- Promoting education and outreach programs on trip reduction, energy efficiency, water conservation, and waste diversion
- Leading by example through increased efficiencies in the City's operations, buildings and practices

Many of these strategies are already being advanced by the City as part of its overall push towards a more livable, safe and sustainable community. Any new policies, programs, or projects proposed in the CAP would be further investigated, planned and implemented after the CAP is adopted. Each will need to go through their own processes of public review, adoption, funding and implementation.

In addition, El Cerrito's progress towards meeting these targets will be monitored over time. Staff expects that these targets will be reexamined as part of an adaptive

management approach that will take into account updated information, changing policy, and advancements in technology.

FINANCIAL CONSIDERATIONS

There are no financial obligations associated with setting emission reduction targets. However, there will be costs associated with implementation of an adopted Climate Action Plan to assist the City in meeting the 2020 and 2035 reduction targets. It should be noted that there are many factors that will mitigate these costs, since climate protection activities often support multiple goals. For instance, emissions reduction measures that result in increased energy, water, and fuel efficiencies can be very cost effective and result in long term cost savings. Other measures, such as Transit-Oriented Development and improved pedestrian amenities, are goals already advanced in the General Plan and other related plans and policies, and thus their implementation would not be solely to reduce emissions. Finally, there is state and federal funding available for programs and projects that reduce greenhouse gases. Staff will pursue such funding to advance the implementation of the CAP.

LEGAL CONSIDERATIONS

The AB32 Scoping Plan recommends that local governments strive to meet the 15% 2020 goal. However, there is no legal penalty associated with not achieving an emissions reduction target. Conversely, there is a potential incentive to developing a Climate Action Plan that uses, at least, the 15% reduction target. An effective and defensible CAP provides El Cerrito with the option to take advantage of CEQA's tiering and streamlining provisions. BAAQMD's CEQA Guidelines uses the 15% reduction target as one of the defensible standards for Climate Action Plans that could be used for CEQA tiering and streamlining purposes.

Reviewed by:

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Scott Hanin, City Manager

Attachments:

A. Resolution