



COUNTY OF SAN MATEO
Inter-Departmental Correspondence

Board of Supervisors

DATE: November 4, 2005
BOARD MEETING DATE: November 15, 2005
SPECIAL NOTICE/HEARING: None
VOTE REQUIRED: Majority

TO: Honorable Board of Supervisors

FROM: Supervisor Jerry Hill
Supervisor Rose Jacobs Gibson

SUBJECT: **Resolution authorizing the County to Participate in the Sustainable Silicon Valley Initiative and Commit to Reducing Carbon Dioxide (CO₂) Emissions Through Reducing Energy and Fuel Consumption**

Recommendation

Adopt a resolution to support the goal of Sustainable Silicon Valley Initiative to reduce CO₂ emissions in the region by setting and working towards the following goals for the County using 2004/05 as a baseline:

1. Reduce CO₂ emissions by 10% by 2010.
2. Reduce the amount of electricity supplied by the grid (PG&E) to existing County facilities by 20% by 2010.
3. Maintain the current level of natural gas consumption in facilities, even while switching to energy efficient gas fired co-generation plants at the Maguire Jail and the San Mateo County Medical Center.
4. Raise the published miles per gallon (mpg) average of the County passenger vehicle fleet by 5 mpg by 2010. The current average of County passenger vehicles is 22 mpg.

In addition, the resolution commits the County to becoming a partner in the Sustainable Silicon Valley Carbon Dioxide Emissions Reductions Project and to report annually on the progress made in reducing CO₂ emissions.

Vision Alignment

Commitment: Responsive, effective and collaborative government

Goal(s): Goal 20: Government decisions are based on careful consideration of future impact, rather than temporary relief or immediate gain.

Goal 22: County and local governments effectively communicate, collaborate, and develop strategic approaches to issues affecting the entire County.

Adoption of the proposed regulation will demonstrate our continuing commitment to conserve energy and practice environmental stewardship.

Background

Previous Board Action

This Board has taken several actions over the past few years to reduce energy consumption and improve air quality in the County, including:

- 1992: Established the Commute Alternatives Program, which provides a subsidy to encourage our employees to use mass transit instead of single occupant vehicles in commuting to work;
- 1995: Approved the County's participation in the Environmental Protection Agency's Green Lights Program to improve the energy efficiency of the County Buildings;
- 2000: Adopted an ordinance that regulates the use of certain fuels in wood burning stoves and fireplaces;
- 2001: Adopted the Sustainable Building Policy, which requires that new County buildings be designed and constructed to the highest practicable Leadership in Energy and Environmental Design (LEED) standards;
- 2002: Adopted a Clean Vehicles Procurement policy, which requires consideration of acquisition of the lowest emission vehicles for the County fleet, with the exception of public safety and emergency vehicles; and

Approved several other programs that reduce CO₂ emissions such as recycling, waste reduction, and traffic congestion reduction.

History

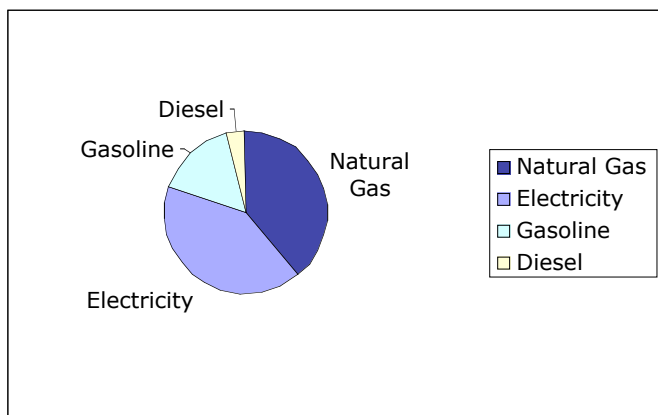
The Kyoto Protocol, an international treaty on global warming, recognizes the affect on the climate by CO₂ and other greenhouse gas emissions, including the possible increase in the average global precipitation; soil moisture decline in many regions; intense rainstorms becoming more frequent; and an estimated rise in the sea level of two feet along most of the United States coast. The Protocol was negotiated in 1997 and ratified in February 2005, with the United States as a notable exception. In October 2005, 182 Mayors representing nearly 40 million Americans committed to the US Mayors Climate Protection Agreement to "meet

or exceed” the Kyoto Protocol goals of 5.2% reduction in greenhouse gases by 2010 from the 1990 levels.

Sustainable Silicon Valley, a nonprofit organization initially comprised of the California Environmental Protection Agency, the Silicon Valley Manufacturing Group and the Silicon Valley Environmental Partnership, identified CO₂ emission reduction as the foremost environmental goal for the area and created the Sustainable Silicon Valley Initiative to address this issue. Sustainable Silicon Valley works with businesses and municipalities to reduce CO₂ emissions, provides educational and networking forums, and offers recognition and encouragement to their partners.

Discussion

Sustainable Silicon Valley has a goal to reduce CO₂ emissions in the region to 20% below the 1990 levels for the Bay Area by 2010, and asks businesses and governmental agencies to set a reduction goal for their organizations.



This pie chart illustrates the energy sources that the County is using and how much each energy source contributes to the County’s overall CO₂ emissions.

Joining the Sustainable Silicon Valley Initiative will offer access to educational forums and assistance and acknowledgement of San Mateo County as a leader in air quality, energy reduction, and climate change programs.

I believe proposed goals as described in the Recommendation section of this report are reachable yet challenging, and demonstrate a commitment by this Board to preserve and enhance the quality of life in the County.

The County will need to work to meet these goals if the resolution is approved by this Board, by continuing to:

- Increase the energy efficiency in County facilities
- Choose gas-electric hybrid vehicles and other fuel-efficient models when purchasing new vehicles.
- Build energy efficient LEED buildings
- Promote alternative transportation options for County staff
- Expand the County’s enrollment in demand response programs (PG&E’s Flex Your Power NOW!) by voluntarily reducing demand when an alert is

received

The County will also need to solicit the cooperation of Departments to:

- Seek opportunities to convert existing buildings to renewable energy sources.
- Substitute fly ash for cement in concrete to the highest practicable amount for a project. Currently DPW has an internal policy to use fly ash concrete, which reduces the need for cement. The process of making cement, which is the common “glue” in concrete, produces 8% of the CO₂ and other global greenhouse gases that are produced worldwide.
- Educate employees on ways to save energy at work and at home.
- Encourage water conservation because of the correlation between water and energy consumption.
- Collaborate with and support nonprofits and public agencies that are working to reduce energy use or greenhouse gas emissions.
- Provide outreach materials and events that directly promote energy reduction and renewable sources of energy through the County’s RecycleWorks Green Building Program.
- Consider new technologies and innovative approaches to reach the proposed goals
- Initiate a collaborative Energy Strategy Development Process for the 21 jurisdictions in San Mateo County in conjunction with City County Association of Governments(C/CAG).

A resolution has been approved as to form by County Counsel.

Next Steps

The Department of Public Works will develop a specific plan and goals for energy reduction that reflects the CO₂ emissions reduction goals of the proposed resolution and bring this back to this Board for approval.

The RecycleWorks Program in the Department of Public Works will identify ways in which to educate the public and County employees about climate change, energy and water conservation and to incorporate these issues and solutions in greater detail on the RecycleWorks’ website.

RecycleWorks, as staff for C/CAG, will bring forward the idea of an Energy Strategy Development Process to C/CAG’s committees for discussion.

Fiscal Impact

There is no net cost to the County General Fund in making a commitment to Sustainable Silicon Valley or in adopting the proposed resolution setting goals for reducing CO₂ emissions; this is a voluntary project and there is no financial penalty for not achieving our goals.

However, there will be costs associated with achieving the goals. The Public Works

Department's plan will evaluate the costs and benefits of any suggested projects including a recommended source of funding, which will be brought back to this Board for our consideration.