

9 GREENHOUSE GAS ACTION ELEMENT

This element summarizes the County of Alameda's efforts to reduce its greenhouse gas (GHG) emissions in the Eden Area. It includes a discussion of the main strategies the County is undertaking to reduce GHG emissions and a summary of goals and policies found throughout this General Plan that address urban form, growth patterns and alternative transportation as they relate to climate. It also provides additional goals and policies specifically aimed at reducing greenhouse gas emissions from new growth in the Eden Area. (Please note that this element has been newly added to the General Plan since the completion of the Final Draft General Plan in March 2007.)

A. Background

The County of Alameda has taken an active role in adopting initiatives and policies to reduce GHG emissions. In June 2006, the Alameda County Board of Supervisors unanimously approved Resolution-2006-204, which established the County Climate Change Leadership Strategy to achieve the GHG emission reduction targets set forth in State of California Executive Order S-3-05. In line with Executive Order S-3-05, the County aims to reduce emissions to 1990 levels by 2020 and to 80 percent below 1990 levels by 2050.

To meet these targets, the County will prepare and maintain a Climate Action Plan (CAP). Alameda County's CAP will consist of a plan for its government operations (Government CAP) and a plan for the unincorporated areas of the County (Community CAP). The Community CAP is considered part of the County General Plan. CAP preparation involves the following five steps, which follow the model created by the nonprofit organization ICLEI – Local Governments for Sustainability:

- ◆ Conduct a greenhouse gas emissions inventory
- ◆ Establish an emissions reduction target
- ◆ Develop a local action plan to reduce emissions
- ◆ Implement the local action plan
- ◆ Monitor progress and report on results

The County has conducted an emissions inventory for its government operations and its unincorporated areas, and will reevaluate these inventories on a regular basis to monitor its progress toward the reduction targets set forth in Resolution-2006-204. The Greenhouse Gases section of the EIR for this General Plan contains an emissions inventory for the Eden Area.

The County has initiated several other activities that support its GHG emissions reduction goals, including the following:

- ◆ In 2003, the County adopted Ordinance No. 2003-63, which mandated green building practices for certain County buildings. These practices were used in the development of the Leadership in Energy and Environmental Design (LEED) Gold-certified Juvenile Justice Center in San Leandro.
- ◆ Over 200 businesses, public agencies and non-profit organizations in Alameda County have been certified through the Alameda County Green Business Program.
- ◆ The County has installed solar and fuel cells at government facilities that have resulted in reduced energy usage and savings to taxpayers.
- ◆ The County has committed to reduce vehicle emissions associated with County operations through its fleet, which includes hybrids and vehicles fueled by vegetable-oil and biodiesel, and through its internal car-sharing program.
- ◆ In July 2007, Alameda County was the first county in California to sign the Cool Counties Initiative, committing to work with other jurisdictions at the national, State and local levels to reach the GHG emission reduction targets in Executive Order S-3-05.
- ◆ In April 2009, the County adopted a Green Building Ordinance (Ordinance No. 2009-16) requiring certain private development projects to comply with green building standards.
- ◆ The County has committed to implement a county-wide, assessment-based, energy efficiency and renewable energy program to enable county residents to install renewable energy systems and to improve the energy efficiency of their homes.

B. Alameda County Community Climate Action Plan Process

The Alameda County CAP (both the government and community portions) is a key component to implementing the County Board of Supervisor's Resolution 2006-204 noted above. The CAP is intended to encompass and extend beyond the Eden Area General Plan 2025 timeframe. The CAP will implement emissions targets mandated by the State of California under AB32 that require the attainment of specific GHG reduction targets through 2050.

The CAP is intended to be the guiding document for the County's government and community GHG reduction efforts. The CAP identifies measures (strategies, programs and policies) for implementation in the areas where the County has the greatest influence to reduce its internal and community-wide GHG emissions.

C. Summary of General Plan Policies Addressing Climate Change

This section provides a summary of the numerous goals and policies in other elements of the General Plan that facilitate a reduction in greenhouse gas emissions. These goals and policies acknowledge the role of land use and transportation patterns in reducing climate change impacts.

1. Infill Development

Policy P2 under Goal LU-1 of the Land Use Element is to encourage new development and redevelopment to create a coherent pattern of development, maximize the use of land and fill in gaps in the urban environment. Policy P4 under Goal LU-5 calls for allowing well-designed infill development that increases the density of existing neighborhoods. Policy P1 of Goal LU-6 is to encourage the redevelopment of underutilized deep lots to increase opportunities for a range of housing types. Goal LU-7 calls for the development of attractive corridors throughout the Eden Area that provide a mix of uses to surrounding neighborhoods, thereby reducing vehicle trips. Policy P3 under Goal LU-8 states that the County should pursue commercial and vertically-mixed use development within

districts. Policy P1 under Goal LU-14 requires that new commercial development be located in existing commercial areas that are well-served by public transit.

2. Alternative Transportation

Under Goal LU-7 of the Land Use Element, Policy P7 mandates that public transit amenities be included with the approval of new development projects. Policy P8 requires new projects to maintain and strengthen pedestrian connections to major transit facilities such as BART, Amtrak and bus stops. Under Goal LU-17, Policy P1 requires analysis of new development projects under Bay Area Air Quality Management District (BAAQMD) CEQA Guidelines, and the application of mitigation measures to reduce vehicle trips and vehicle miles traveled.

Under Goal CIR-1 of the Circulation Element, Policy P2 states that roadway modifications should include accommodations for bicycle and pedestrian travel, whenever possible. Policy P3 calls for promoting land use concepts that minimize automobile trips and encourage walking, bicycling and transit use, and Policy P6 mandates project-level design features to facilitate alternative modes of transportation in new developments. Action A7 directs the County to develop a local TDM program to identify realistic target reductions in automobile travel, and work with Eden Area employers to achieve these targets.

Goal CIR-5 is to ensure that public transit is a viable alternative to driving in the Eden Area. Under this goal, Policies P1 and P3 are to encourage AC Transit and BART to provide service throughout the Eden Area and to support efforts to enhance transit service, such as the extension of BART to San Jose and expanded bus service on East 14th Street/Mission Boulevard and Hesperian Boulevard.

Goal CIR-6 calls for the completion and improvement of the pedestrian circulation network in the Eden Area. Policy P1 states that walking should be considered an essential and integral part of the County's circulation network. Policy P8 calls for the provision of direct and safe pedestrian access routes between development and transit facilities, such as the Bayfair BART station, the Amtrak Capitol Corridor station in Hayward and major bus transit routes, to encourage

increased transit use. Policy P9 states that the pedestrian system shall have a high level of connectivity between residences and local, daily destinations, such as schools, shopping and parks.

Policies under Goal CIR-7 will lead to the development of safe and connected local and regional bicycle networks and facilities. Policy P2 requires the development and maintenance of a local bikeway system that serves employment centers, schools, parks and transit facilities, and Policy P4 calls for direct bicycle access between residential neighborhoods and transit stations.

3. Waste Reduction

In the Public Facilities and Services Element, Goal PF-8 is to decrease the volume of solid waste generated in the Eden Area through waste reduction, recycling and resource conservation. Policy P7 is to implement the County's Green Building Ordinance (Ordinance No. 2009-16) for residential and non-residential projects. Policy P8 requires the County to expand curbside recycling to all residential communities in Eden.

D. Additional Goals, Policies and Actions

Goal GH-1 Reduce greenhouse gas emissions in the Eden Area.

Policies

- P1. The County shall continue to participate in the ICLEI Climate Protection Program or a similar program designed to guide actions toward reductions in greenhouse gas emissions.
- P2. The County shall continue to participate in State and regional efforts to reduce greenhouse gas emissions.
- P3. The County's Climate Action Plan (CAP) shall be a guiding document for reductions of greenhouse gases in the Eden Area and shall be integrated into the County General Plan.

- P4. The County shall participate in regional and statewide efforts to improve the proportion of renewable energy available to energy customers in the Eden Area.

Actions

- A1. Reevaluate the government and community emissions inventories on a regular basis to monitor progress toward the County's emissions reduction targets set forth in Resolution-2006-204.
- A2. Review and, if appropriate, modify the Zoning and Subdivision Ordinances to support the emissions reduction targets of Resolution 2006-204 and the goals of the CAP.

Goal GH-2	Prepare the Eden Area for the effects of climate change through the adoption of adaptation and resiliency strategies.
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Policies

- P1. The County shall participate in regional efforts focused on adapting communities to the effects of climate change.
- P2. The County shall work with cities on either side of the portion of San Lorenzo near the San Francisco Bay to evaluate threats due to sea level rise.

Actions

- A1. Adjust the CAP to reflect any new information about sea level rise or other negative effects of climate change that may impact the Eden Area.
- A2. The County will provide development guidelines to promote projects that are consistent with Senate Bill 375.

Goal GH-3 Improve the energy efficiency of new and remodeled buildings in the Eden Area.
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Policies

- P1. New County-owned buildings in the Eden Area shall achieve a Leadership in Energy and Environmental Design (LEED) Silver certification (or higher) under the United States Green Building Council's LEED program, or equivalent certification.
- P2. New privately-developed construction and remodels above a certain size shall achieve certification under LEED, Build It Green GreenPoint Rated, or equivalent rating system. This policy shall be implemented through the County's Green Building Ordinance. New construction and remodels not required to achieve certification under the Green Building Ordinance shall be encouraged to incorporate green building techniques designed to reduce the energy and water use of new or remodeled buildings.
- P3. The County shall encourage the adaptive reuse of existing buildings, so long as they can be used efficiently or remodeled for energy-efficient operations.
- P4. The planting of trees should be required on the south- and west-facing sides of new buildings to reduce energy usage, unless trees would interfere with existing solar equipment.
- P5. New development projects should be designed to maximize passive solar energy techniques, including house orientation, street and lot layout, vegetation and protection of solar access. Maximum efficiency is gained by siting homes on an east-west axis.

Actions

- A1. Modify the Zoning and Subdivision Ordinances to reflect the energy efficiency measures outlined in this Goal.
- A2. Develop a green permitting program to encourage green building through fast-track permitting or reductions in permit fees correlated with the number of green features in the buildings.
- A3. Develop a green design assistance program including a checklist that applicants for new construction or remodels are asked to complete and that suggests ways that buildings could be more energy- and water-efficient.
- A4. Review and consider adopting the State Green Building Code and other ordinances designed to improve energy efficiency in buildings.
- A5. Train permit-review and planning staff in green building techniques and encourage them to integrate that information throughout their work.
- A6. Develop a program targeted at low-income homeowners to improve the energy-efficiency of existing buildings.
- A7. Consider the renewal of the County Green Building Ordinance when it sunsets.