# CITY OF ALBANY CITY COUNCIL AGENDA STAFF REPORT

Agenda Date: January 4, 2010 Reviewed by: BP

SUBJECT: City of Albany Climate Action Plan

REPORT BY: Jeff Bond, Building & Planning Manager

#### **STAFF RECOMMENDATION**

- 1. Receive a staff overview about the plan and conduct roundtable discussions with members of the Sustainability Committee, Planning & Zoning Commission and public.
- 2. At the conclusion of the roundtable discussions and report out from each table, provide some initial Council reactions, requests for clarification, and other comments on the plan.
- 3. Agendize an action item for January 19th on direction to the Sustainability Committee, Planning & Zoning Commission and staff to finalize the plan for adoption by the City Council by March, 2010.

#### **BACKGROUND**

The emergence of an awareness of the threat of global warming represents one of the most significant new elements in land use planning in California. Community concern and a series of legislative initiatives beginning in 2006 are adding a substantial new dimension to land use policy and project review both in Albany and at the California state government level. Locally, the goal of reduction of creation of greenhouse gases (GHG) will become a new metric for City policymakers to use in the evaluation of individual development proposals. Furthermore, the statewide implementation of the legislative mandate is expected to lead to closer integration of land use, transportation, and housing policies and programs.

In June 2006, the City of Albany committed to becoming a member of ICLEI-Local Government for Sustainability (ICLEI) and participating in the Alameda County Climate Protection Project (ACCPP). The project was launched by ICLEI in partnership with the Alameda County Waste Management Authority & Recycling Board (StopWaste.Org) and the Alameda County Conference of Mayors. In committing to the project, the City embarked on an ongoing, coordinated effort to reduce the emissions that cause global warming, improve air quality, reduce waste, cut energy use and save money. Toward that end, ICLEI and StopWaste.Org assisted the City to conduct a baseline Greenhouse Gas Emissions Inventory, and to set a community-wide emissions reduction target.

### **Overview of Phenomenon of Climate Change**

The earth is naturally warmed by energy from the sun that reaches surface of the earth. Heat from the surface radiates back into the atmosphere. Some of the radiated energy reflects off gases in the atmosphere and comes back to the surface of the earth yet again. The phenomenon of global warming during the past 50 years is the result of an increase in certain gases in the atmosphere that cause an increase in reflected energy back to the surface of the earth. The term greenhouse gases comes from the analogy that these gases in the atmosphere act similar to glass in a greenhouse, allowing sunlight to come through, but holding the heat in.

Carbon dioxide is one of the most significant greenhouse gases and the burning of fossil fuels increases CO2 in the atmosphere. Thus, the primary emphasis on the reduction of greenhouse gases is on the production of carbon dioxide (CO2). The production of CO2 is typically measured in metric tons (MT).

The consequences of global warming are multifaceted. One of the most direct consequences is that higher temperatures will cause the melting of glaciers world-wide, which in turn will cause sea-level rise. For the Bay Area, the increase in sea-level poses an extraordinary threat to backbone economic infrastructure as well as the ecological health of the region.

### State Government Initiatives on Climate Change

At the state government level, two key pieces of legislation have been adopted into law in the past several years. The first law, AB 32, was approved in 2006, and requires the state of California to reduce greenhouse gas production to 1990 levels by the year 2020. In particular, the law granted the California Air Resources Board (CARB) the authority to adopt regulations such as emission standards for vehicles and light trucks.

In 2008, SB 375 was approved. This legislation established a detailed structure of statewide planning that will be necessary to achieve the greenhouse gas production goals. In particular, SB 375 authorized regional planning agencies to establish policies that ensure that expenditures of funds for transportation improvements and targets for development of housing will meet GHG goals. The implementation of SB 375 is scheduled to occur over the next several years.

In 2009, various state and regional agencies have proposed modifications to California Environment Quality Act Guidelines and methodologies. The proposed Guidelines, which are expected to be approved in 2010, modify the environmental review process that the City uses for future projects. The new Guidelines will require an analysis of the climate change implications of a proposed project. In addition, it modifies the review of the transportation and parking impacts of a project. Finally, the new Guidelines allow for streamlined review of projects that achieve climate change policy objectives.

### **DISCUSSION**

California communities are using climate action plans (CAP) as the organizing documents to bring together analysis and polices to meet community GHG reduction goals. Using a grant from the Bay Area Air Quality Management District, the international planning consulting firm EDAW (as a result of a recent corporate merger, now known as AECOM) was retained jointly by the cities of Albany and Piedmont to prepare Climate Action Plans (CAP) for each community.

The draft Climate Action Plan (CAP) has been posted on the City web site. It is a comprehensive document that provides detailed information on methodologies and policy initiatives. The purpose of this staff report is to summarize the GHG emissions target established by the City Council and provide an overview of the important policy initiatives in the CAP.

### Target for Reducing Greenhouse Gas Emissions

In 2007, the City Council established a goal, by the year 2020, of reducing the City's greenhouse gas emissions to a level 25% below 2004 emissions. The analysis in the CAP shows that in 2004 GHG baseline was 69,800 MT, and thus the City Council target GHG emission level is 52,400 MT.

The baseline of greenhouse gas emissions within the City was based on the ICLEI analysis, with adjustments made for items beyond the control of the City. For example, one of the most significant adjustments to the baseline is not to count vehicles on Interstate 80 or on San Pablo Avenue, since the City has no control over pass-through trips.

Assuming business as usual, GHG are expected to grow by 2% between 2004 and 2020. Thus, for purposes of the CAP, the City of Albany 2020 business as usual baseline is projected at 72,000 MT. Closing the gap between the 52,400 MT target and the 72,000 MT business as usual projection is the goal of the CAP.

### Draft Policy Measures

The draft City of Albany CAP was prepared by EDAW and reviewed in detail by the Sustainability Committee. A wide range of potential policy measures were evaluated. For many policies, the greenhouse gas reduction potential by the year 2020 was calculated and incorporated into the analysis. Other policies in the CAP are meaningful, but cannot be accurately quantified, or are not expected to have quantifiable impacts on greenhouse gas emissions that are measured in the baseline. The following is a summary of the strategies:

### Building & Energy Strategy Greenhouse Gas Reduction Potential: 8,495 MT CO2

• Building Energy Efficiency – Adopt a Residential Energy Conservation Ordinance and Commercial Energy Conservation Ordinance mandating energy efficiency upgrades at the time of property sale. In addition, provide financing and/or financial incentives to property owners for energy efficiency upgrades.

- Building Code Upgrades Adopt various energy efficiency standards.
- City Operations Install LED streetlights, conduct energy audits and purchase renewable energy.

### Transportation & Land Use Strategy Greenhouse Gas Reduction Potential: 4,640 MT CO2

- "Complete Streets" Identify and implement capital improvement projects to facilitate pedestrian and bike safety & access on City streets.
- Land use policies Update the city's land use regulations to promote commercial development that is mixed-use, neighborhood-serving, transit-oriented, etc.
- Transportation Demand Management (TDM) Program Establish an Albany Transportation Management Authority to support local employer TDM efforts. As a part of transportation programs, policies also would seek to improve public transit services and school bus services.
- Parking Establish a commercial parking fee to discourage driving and a residential parking permit system for residential areas adjacent to commercial districts.
- City Operations Implement an energy-efficient vehicle fleet.

### Waste Reduction Strategy

### Greenhouse Gas Reduction Potential: 2,210 MT CO2

- Waste Reduction Establish ordinances and programs to achieve a zero waste reduction target.
- City Operations Implement a paperless office.

# Green Infrastructure Strategy Greenhouse Gas Reduction Potential: 130 MT CO2

• Urban Forestry– Expand and enhance urban forestry and green street programs.

### Water Conservation Strategy Greenhouse Gas Reduction Potential: 55 MT CO2

• Building Code Upgrades – Adopt various water conservation standards.

### Food & Agriculture Strategy Greenhouse Gas Reduction Potential: 130 MT CO2

• Urban Agriculture – Support regionally produced foods and establish urban agriculture programs.

# ANALYSIS

### Sustainability Committee and Planning and Zoning Commission Discussion

Both the Sustainability Committee and the Planning and Zoning Commission held lengthy substantive discussions on the current draft of the plan over the course of several meetings. The following is a brief summary of some of the comments (note duplicative comments combined removed):

- Comment from the public regarding accuracy of table on page I-3. Also concern about policy to expand neighborhood retail into residential areas.
- Comment from the public suggesting increase in utility tax to encourage energy efficiency and to raise funds for CAP policy implementation
- Comment from the public suggesting that City polices can effect San Pablo Avenue
- Need better information on costs
- Concern that large pieces of the puzzle seem unrealistic
- Should not give credit for a reduction in GHG by preparing a plan. Need to implement plan.
- Recently completed upgrades at University Village not incorporated into analysis
- Non-quantifiable measures different than quantifiable measures
- City Council needs to give direction on how far to go with costly measures
- Need broad level discussion of budget allocation and taxes on activities that do not contribute to CAP objectives
- Need broad level discussion of parking policies

### Planning and Zoning Commission Discussion

- Some of the non-quantifiable items may be quantifiable in the future
- City needs to show leadership and make CAP a core principle of land use
- Worthwhile to do things even if not quantifiable

- Recommend avoiding use of PV panels that have high embedded energy that goes into production.
- Albany should set an example for other communities
- City of Albany impacts dwarfed by Chinese business parks
- Using cars less is an improvement in lifestyle
- Consider adding schools
- Consider seismic retrofit requirements
- Consider reduced use of power strips can reduce energy usage
- Need to put priority on point of sale as the opportunity to make energy efficiency improvements
- Need to have a discussion about using the purchase of carbon offsets to further advance towards goal.
- Look for opportunities to partner with PG&E
- Comment from the public suggesting that the City waive fees for projects that meet standards.
- Bring back "time of use" billing for PV panels and smart metering
- Consider giving planning "energy bonus" to projects similar to affordable housing density bonus.
- Better bus shelters would help public transit
- Investigate parking policies in commercial and residential districts
- Look to match profile of local citizens to local jobs being created
- Need to look at adaptation policies in anticipation of sea level rise
- Support local agriculture and food security movement

### **Preliminary Policy Issues for Discussion**

Based on Sustainability Committee and Planning and Zoning Commission discussion, it is apparent that the draft CAP introduces several policy issues that ultimately will require City Council direction.

- *Community Challenge* One of the most significant policy issues that emerges from the draft CAP is that the strategies and initiatives identified do not reach the 25% target. In particular, the CAP estimates the gap at 4,070 MT a year, which translates to a 19% decrease in 2004 GHG emissions. City Council will need to provide direction on acceptability of a plan that does not fully reach the original goal.
- *Revenue Sources* Appendix C of the CAP provides an analysis of potential costs associated with the implementation measures. At this stage, the costs should be considered rough orders of magnitude. The total cumulative cost of all the measures, over the ten-year period 2010 to 2020, is estimated at \$50.4 million.

The most expensive measure is the implementation of complete streets (measure TL 1.1), which is estimated at \$42.1 million. Other expensive measures include provided financial incentives for energy efficiency improvements (BE 2.2) and

\$1.1 million for incentives for infill development (TL 3.3). In addition \$900,000 is estimated for the increased staff cost associated with promoting pedestrian and transit oriented development (TL-3). The City Council may wish to provide direction on whether or not it is realistic to incorporate into the plan the possibility of creating additional local tax revenues sources.

• **Priority Setting** - Given the number of measures that are available to choose from that directly or indirectly will lead to reductions in greenhouse gas emissions, one of the largest challenges is to prioritize the initial steps that should be taken. Unless otherwise specified, the most likely approach would be to focus on items that are "low hanging fruit" that are easy to implement with existing resource, but may not make a large difference towards the City Council goal. An alternative would be to pursue items that make the largest quantifiable difference in emissions, but require a larger upfront investment in staff time and costs. The City Council may wish to provide direction on whether or not it is realistic to consider creating additional local revenues sources.

### STUDY SESSION AND NEXT STEPS

### **Study Session Format**

The study session will be organized with a brief staff report and questions from Council, followed by a breakout session with City Council members, Sustainability Committee members, and Planning and Zoning Commission members as well as the general public. Staff will be preparing materials that will spark discussion on policy issues and implementation priorities. At the conclusion of the roundtable discussions, each table would be asked to briefly report on their discussions. The meeting would conclude by providing the Council an opportunity to provide some initial reactions, requests for clarification, and other comments on the plan.

### Next Steps

Following the study session, an action item will be agendized for the Council's January 19 meeting to provide Council an opportunity to provide direction to the Sustainability Committee, Planning & Zoning Commission and staff to finalize the plan. The Sustainability Committee will meet in January to prepare final comments to the consultant.

Following the preparation of the final report, both the Sustainability Committee and the planning and Zoning Commission will be asked to make a recommendation to the City Council regarding adoption of the CAP. Council action is anticipated to occur in March 2010. The completion schedule is driven by terms of the BAAQMD grant requirements.

After approval of the final report, staff will prepare a document that will be used to track CAP implementation priorities. This document would be designed to be easily amended as climate change policies emerge at the state and regional level, and as financial resources

for various initiatives become available. In addition, the final report is expected to be a cornerstone of a new General Plan.



# **Instructions and Suggestions for a Good Discussion**

- The goal of the study session is to provide the City Council an opportunity to gain a variety of perspectives on the draft climate action plan and its policies.
- One person from each group should be designated to briefly report back at the conclusion of the discussion.
- During the discussion, each person should try to be brief and avoid repetition.
- It is OK not to agree on every issue. Be respectful of differences of opinion.

# **Discussion Question #1**

- Pick from the attached list the first three things City government should do to address climate change and reduce greenhouse gases.
- Is there something on this list City government should definitely not carry out?
- Are there items on this list that other organizations or government agencies should be responsible for?

# **Discussion Question #2**

Should the City be a leader in implementing local greenhouse gas reduction policies even if it means more regulations and higher costs to residents and businesses compared with neighboring cities?

### **Discussion Question #3**

- Five or ten years from now, what is the newspaper headline that you would like to read related to climate action plan implementation in the City of Albany.
- In contrast, what is the newspaper headline you would not want to see about City of Albany climate action plan implementation.

# **Discussion Question #4**

- What aspect of City policies related to climate change and greenhouse gases need more attention?
- What aspect of the draft Climate Action Plan needs more attention?

# **Discussion Question # 1: List of Climate Action Plan Policies**

	Program	Metric Tons of CO2	Rough 10- Year Cost Estimate	Notes
1.	<b>Building Energy Efficiency</b> – Adopt an Energy Conservation Ordinance and mandating energy efficiency upgrades of existing building at the time of property sale.	1,300	\$1,500,000	
2.	<b>Building Code Upgrades for Energy Efficiency</b> – Adopt various energy efficiency standards for new construction.	2,000	\$1,400,000	
3.	<b>Solar Power</b> – <i>Encourage property owners to use solar energy and identify solar energy districts for commercial buildings.</i>	4,900	\$300,000	
4.	<b>City Government Use of Energy</b> – Install LED streetlights, conduct energy audits and purchase renewable energy.	200	\$70,000	
5.	<b>"Complete Streets"</b> – Identify and implement capital improvement projects to facilitate pedestrian and bike safety & access on City streets.	1,300	\$42,300,000	
6.	<b>Land use policies</b> – Update the city's land use regulations to promote commercial development that is mixed-use, neighborhood-serving, transit-oriented, etc.	2,200	\$1,000,000	
7.	<b>Transportation Demand Management Program</b> – Establish an Albany Transportation Management Authority to support local employer TDM efforts. As a part of transportation programs, policies also would seek to improve public transit services and school bus services.	1,100	\$50,000	
8.	<b>Parking</b> – Establish a commercial parking fee to discourage driving and a residential parking permit system for residential areas adjacent to commercial districts.			
9.	<b>City Government Vehicles</b> – <i>Implement an energy-efficient vehicle fleet.</i>			
10.	<b>Waste Reduction</b> – <i>Establish ordinances and programs to achieve a zero waste reduction target.</i>	2,200	\$200,000	
11.	<b>City Government Operations</b> – <i>Implement a paperless office</i> .			
12.	<b>Urban Forestry</b> – <i>Expand and enhance urban forestry and green street programs.</i>	130	\$200,000	
13.	<b>Water Conservation</b> – Adopt various water conservation standards and implement EBMUD conservation programs.	55	\$1,100,000	
14.	<b>Urban Agriculture</b> – Support regionally produced foods and establish urban agriculture programs.			
15.				