



STAFF REPORT

Date: November 20, 2012

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Subject: **San Gabriel Energy Action Plan**

SUMMARY

The City of San Gabriel is working with Southern California Edison ("Edison"), the San Gabriel Valley Council of Governments ("the COG") and project consultant PMC to develop its Energy Action Plan (The Plan). This is in response to the Global Warming Solutions Act of 2006 (AB 32), which set statewide greenhouse gas (GHG) emission reduction targets.

The City Council adopted the Plan's policies addressing municipal energy use at its regular meeting on September 4, 2012. PMC has since presented City staff with a complete Plan which also addresses community-wide energy use. This complete plan includes a list of policies and implementation measures to improve residential, commercial and municipal energy efficiency.

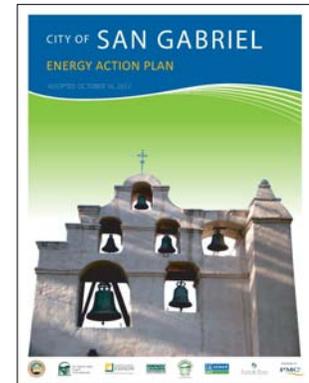
The Planning Commission adopted PC Resolution 12-04 at its regular September 10, 2012 meeting recommending that Council adopt the complete Plan. Staff recommends that the City Council adopt Resolution No. 12-20 to adopt the Energy Action Plan.

I. INTRODUCTION

The Energy Action Plan (The Plan) is the product of a year-long collaboration between the City of San Gabriel, the COG and project consultant PMC. The Plan provides a roadmap to help the City reduce its municipal and community-wide energy use and greenhouse gas emissions to meet AB 32 GHG emissions reduction targets.

The Plan will accomplish several important things for San Gabriel. It will:

1. Make it easier for residents and businesses to finance energy efficient improvements and save money on energy bills.
2. Provide a roadmap for reducing the City's energy bills.
3. Reduce the City and community's impact on the environment.
4. Provide the City with critical baseline data that the State requires for cities to address GHG emissions.
5. Enable the City to get additional grants.
6. Serve as a foundation for future planning efforts such as general plan updates, climate action plans, Housing Element updates and zoning code updates, among others.



A. Project Timeline

In 2006, the California State Legislature passed, and Governor Schwarzenegger signed, AB 32, which set the 2020 GHG emissions reduction goal of 15 percent below baseline levels into law. In response to the new law, the California Public Utilities Commission authorized Edison to conduct strategic plan activities focused on energy efficiency. With Edison's help, the COG has organized a collaborative effort with the City of San Gabriel and consultant PMC to develop San Gabriel's Energy Action Plan.

- i) **Outreach** - In an effort to engage the community on this topic, staff from the City, the COG and PMC attended several community events. Staff provided energy efficiency handouts and conducted Personal Energy Efficiency Surveys at the 2011 Turkey Trot, Christmas Treelighting Ceremony, and 2012 Lunar New Year festival in Alhambra. Survey respondents indicated that they would be motivated to make energy efficient improvements if they achieved lower utility bills, if grants or incentives were provided, and if they had more information on energy and financial savings. These motivating factors provide a foundation for policies and actions that the City will implement.
- ii) **Planning Commission and City Council Review** - The Planning Commission first reviewed the municipal portion of the Plan on June 11, 2012. The City Council adopted these municipal policies on September 4, 2012. The Planning Commission reviewed and recommended adoption of the complete Plan that also addresses community-wide energy use on September 10, 2012. The complete Plan is now being presented to the City Council for adoption by resolution (see Resolution 12-20 in Attachment 3.)

II. PLAN OVERVIEW

The Plan is broken into four main sections: Greenhouse Gas Inventory and Forecast (Chapter 2), Electricity Profile (Chapter 3), Energy Efficiency Strategy (Chapter 4), and Implementation (Chapter 5). Each chapter is outlined below. The Plan is robust and will result in a greener San Gabriel.

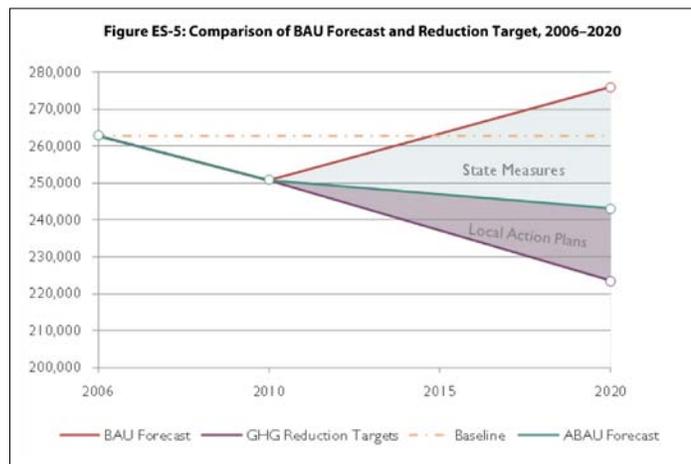
A. **Greenhouse Gas Inventory and Forecast (Chapter 2)**

The City began the planning process by completing a greenhouse gas emissions inventory and forecast ("the Inventory"). The Inventory provides a detailed summary of City and community's largest sources of GHG emissions and electricity trends. This information helps the City identify opportunities for reductions that respond to local conditions. Two types of inventories were completed:

- i) **Community-wide Inventory** - The inventory provides total community-wide GHG emissions and electricity-specific emissions for the baseline year of 2006 as well as an update for 2010. Emissions went down in most sectors between 2006 and 2010 (See pages 35 to 36 of the plan).
- ii) **Municipal Inventory** - The municipal inventory includes GHG emissions from the operations and activities of the City of San Gabriel. Overall, emissions remained roughly the same between 2006 and 2010 (See pages 36 to 38 of the plan).
- iii) **GHG Emissions Scenarios** - The Inventory includes emissions forecasts for three different scenarios relative to 2006 emissions levels – Business As Usual, Adjust Business As Usual, and the State’s GHG reduction targets with City action plans.

The Business As Usual forecast assumes growth with no actions or policies in place to reduce emissions. The Adjusted Business As Usual forecast takes into account State policies that will be implemented by 2020 that will reduce GHG emissions. An explanation of these policies is on page 41 of the plan.

As Figure ES-S (right, p.44 of the plan) shows, the City needs to facilitate a 19,520 MTCO₂ (metric tons of carbon dioxide) emissions reduction below Adjusted Business As Usual levels to achieve the State-recommended goal of 15 percent below baseline levels.



B. San Gabriel’s Electricity Profile (Chapter 3)

The Plan addresses one specific sector that contributes to GHG emissions – electricity use. The Electricity Profile explains how electricity is used by the City and various parts of the community. Electricity used in San Gabriel’s homes and businesses is provided by SCE. If the energy needed for daily activities is decreased, then the amount of electricity SCE needs to generate and transmit can be reduced. This means the GHGs resulting from electricity generation would also be reduced.

- i) **Electricity Use Per Household and Job** – San Gabriel’s per household and per job electricity use are both lower than average for the San Gabriel Valley. This is likely due to modest home sizes and office and service jobs that require less energy than industrial or manufacturing jobs. Pages 50 and 51 of the plan show a comparison with regional and state-wide electricity demands.
- ii) **Electricity Use by the City** - Page 53 of the plan shows electricity use in City buildings and facilities as well as public lighting in 2006 and 2010. Between 2006 and 2010, the City saw a 4 percent decrease in electricity use at buildings and facilities, while electricity use for lighting increased 10 percent. The increase in lighting reflects Edison's reallocation of service

account categories, not an increase in number or use of streetlights. Electricity use at City buildings and facilities decreased between 2006 and 2010. This is partially due to reclassification of accounts, as well as projects the City has completed to improve energy efficiency. Page 55 of the plan shows the change in electricity use at the City's top electricity users between 2006 and 2010.

C. Energy Efficiency Strategy (Chapter 4)

The Energy Efficiency Strategy has goals, policies and actions which will reduce electricity use and GHG emissions to meet reduction targets. These reductions are summarized on page 78 of the plan. The Strategy will yield reductions in the following areas:

1. Existing residential buildings
2. Existing nonresidential buildings
3. New development
4. Planning framework
5. Urban cooling
6. Water and electricity efficiency
7. Municipal projects

The Strategy includes a mix of incentive-based, outreach, and regulatory actions for both new and existing development. The three action types are explained below:

- i) **Action Type 1 - Incentive-based actions** - The incentive-based actions involve the City working with regional, State and Federal partners to promote existing rebate, design assistance and financing programs. Organizations with incentive programs include the COG, Edison, the California Energy Commission, and L.A. County, amongst many others.

The plan only requires that the City *consider* direct incentives. For example, the plan recommends that the City consider adopting incentives for buildings to achieve net zero energy by reducing permit fees by 1 percent for every 1 percent improvement over Title 24 energy efficiency standards. Other permit waivers or fee reductions are also proposed for consideration.

- ii) **Action Type 2 - Outreach actions** - The outreach-oriented actions will help residents and businesses realize another kind of incentive – money saved on their own utility bills. Some of these actions include:

- (1) Distribute informational material from partner organizations.
- (2) Work with the San Gabriel Chamber of Commerce and community groups to share energy efficiency information and resources with the community.
- (3) Promote energy labeling and monitoring programs.
- (4) Update business and development checklists to provide information about energy efficiency actions and building energy performance.
- (5) Encourage Mills Act participants to integrate energy efficiency into renovations.
- (6) Showcase projects with good examples of energy efficient improvements.

- iii) **Action Type 3 - Regulatory actions** - The plan calls for the City to undertake a few regulatory actions. Some of these include:

- (1) Adopt model voluntary energy efficiency guidelines to help staff review plans and help applicants identify opportunities for energy efficiency improvements.

- (2) Update the City's CEQA Guidelines to identify the use of smart-grid integrated appliances and zero net energy for new development as preferred energy efficiency and GHG emissions mitigation measures.
- (3) Integrate energy efficiency guidance into City's design guidelines
- (4) Update the Zoning Code to encourage tree planting standards or covered parking/shade structures to achieve greater parking lot and public space shading.

D. Funding and Implementation (Chapter 5)

The Implementation Chapter includes several key policies: (1) bi-annually monitoring and reporting the City's progress to the City Council, (2) regularly reviewing and updating the City's GHG inventory, energy profile and Plan, (3) continuing to develop partnerships that support implementation of the Plan, and (4) supporting regional funding efforts to implement the Plan. These are explained in more detail on page 81 of the plan.

To achieve electricity reduction targets, the City will also integrate the goals and policies of the Plan into other planning efforts such as the Zoning Code update, Housing Element update, design guidelines and specific plans.

- i) Tracking Progress** - The City will work with regional partners to identify ways to track the status of energy efficiency projects without increasing the level of effort from existing City staff. The COG is working on creating a regionally uniform tracking method and creating a regional energy manager position to help the City track progress. A designated City staff lead (Planning Division) will monitor implementation, support ongoing regional collaboration, and work to streamline implementation.
- ii) Implementation Checklist** - Staff created an Implementation Checklist (Attachment 4) to clarify roles, time frames and staff time for implementing the Energy Efficiency Strategy. The majority of tasks will be assigned to the Community Development Department. The proposed actions have been vetted with the Executive Team and Community Development staff. Staff estimates that the amount of time required to carry out the plan's actions could be covered by a part-time intern.

The plan also includes an Implementation Program Table (Pages 83 through 92 of the Plan). This table identifies the electricity and GHG emissions reductions expected for each action, performance targets, expected savings for participants, time frames, responsible departments, and relevant partners involved.

- iii) Funding** - The Plan does not commit the City to spend money it does not have, but it does recommend that the City consider using energy bill savings to fund municipal retrofits and a part-time staff member to help with implementation, and to carry out its policies as funding becomes available. The possibility of doing this may depend on whether or not there are other important funding demands. Appendix C of the Plan provides cost estimates for each policy.

Staff will also work with the COG and other regional partners to identify additional funding sources and grant opportunities. Adoption of the Plan will position the City to benefit from regional resources and funding to implement community-wide and municipal programs, and equips the City to apply for competitive grant funding.

III. ENVIRONMENTAL REVIEW

The project was reviewed for compliance with the California Environmental Quality Act (CEQA) and is categorically exempt under Guidelines Section 15308, Class 8, actions taken by regulatory agencies to assure the maintenance, restoration, enhancement, or protection of the environment where the regulatory process involves procedures for protection of the environment.

IV. RECOMMENDATION

The Community Development Department recommends that the City Council adopt Council Resolution No. 12-20 to adopt the Energy Action Plan and direct City staff to proceed with implementation.

Attachments:

1. Energy Action Plan – September, 2012
2. Planning Commission Resolution No. 12-04 recommending that the City Council adopt the Energy Action Plan
3. Council Resolution No. 12-20 adopting the Energy Action Plan
4. Energy Action Plan Implementation Checklist