

2012 Council Study Issue

ESD 12-01 Community and Operational Greenhouse Gas Inventory

Lead Department Environmental Services

History 1 year ago None 2 years ago None

1. What are the key elements of the issue? What precipitated it?

This study issue was initiated by the Sustainability Commission. Based on a recommendation from staff, it is now the combination of two study issues proposed by the Sustainability Commission to recommended the 1) study a method for tracking of all forms of energy and water use and recovery across City operations utilizing existing City resources to the extent practicable and 2) set up a process to perform a Community Greenhouse Gas (GHG) Inventory annually.

This study would consider options to accurately track and report data necessary to complete a greenhouse gas emissions inventory, of which energy and water are major components. It is appropriate to combine these study issues because the tool to collect information for a Community GHG would also support Operational data collection. The approach would also support the Climate Action Plan (CAP) goals and actions, and allow centralized data collection for direct reporting and measurement in relation to the CAP.

A number of cities and organizations track community and operational data necessary for GHG inventories using specialized software and/or in-house personnel. This study would identify in more detail:

- Current energy and water tracking procedures across operations
- Existing policies regarding City energy and water use
- Computer software programs that could provide consolidated, centralized data collection and reporting
- Various options regarding existing capabilities vs. external options to track this data and related costs.
- Current baseline information which the City can use to track progress in the future

2. How does this relate to the General Plan or existing City Policy?**Policy 3.1.1 Water Resources — Goals, Policies and Action Strategies**

GOAL A: Water Supply – Acquire and manage water supplies so that existing and future reasonable demands for water, as projected in the 20-year forecast, are reliably met.

Policy A.1: Manage water supply to meet demands for potable water through the effective use of water supply agreements.

GOAL B: Water Conservation – Promote more efficient use of the City's water resources to reduce the demands placed on the City's water supplies

Administrative Policy Manual Chapter 6 - Facilities & Equipment Article 4

Section 1. Purpose. To reduce the level of energy consumption at City owned facilities or by City operated equipment, where possible, for conservation of energy related resources.

Council Policy 3.5.1 - Energy

It is the policy of the City of Sunnyvale that the City will:

- Minimize energy consumption in City operations
- Promote the development of alternative energy resources and support the enhancement of existing technologies
- Provide for efficient vehicular movement on City streets
- Promote alternative modes of transportation to the single-occupant gasoline powered automobile such as mass transit, carpooling, bicycling and walking
- Use energy efficient street light and traffic signal systems
- Reduce energy consumption through Land Use and Community Design Policies
- Utilize alternative energy sources at the Sunnyvale Water Pollution Control Plant
- Support installation of cost-effective energy efficiency measures in municipally owned buildings and facilities
- Support Federal, State, and other Local agency energy-related legislation when consistent with this policy
- Support efforts to provide affordable, reliable, diverse, safe, and environmentally acceptable power to the citizens and businesses of Sunnyvale

Policy 3.7.1 Air Quality — Goals, Policies and Action Statements

Goal 3.7A. Improve Sunnyvale's Air Quality and reduce the exposure of its citizens to air pollutants.

Goal 3.7C. Make a contribution towards improving regional air quality.

Policy 1.1.7 Environmental Quality Regulations

POLICY PURPOSE:

The California Environmental Quality Act of 1970, as amended, ("CEQA") requires cities and other units of local government to adopt objectives, criteria and procedures for the evaluation of projects and the preparation of environmental impact reports.

Policy 7.2.1 Community Engagement — Goals, Policies and Action Strategies

GOAL A: ACHIEVE A COMMUNITY IN WHICH ALL COMMUNITY MEMBERS ARE WELL INFORMED ABOUT LOCAL ISSUES, CITY PROGRAMS AND SERVICES.

U.S. Mayors' Climate Protection Agreement - endorsed by City Council in September, 2007 (RTC 07-301):

- Strive to meet or beat the Kyoto Protocol targets in their own communities, through actions ranging from anti-sprawl land-use policies to urban forest restoration projects to public information campaigns;
- Urge their state governments, and the federal government, to enact policies and programs to meet or beat the greenhouse gas emission reduction target suggested for the United States in the Kyoto Protocol -- 7% reduction from 1990 levels by 2012; and
- Urge the U.S. Congress to pass the bipartisan greenhouse gas reduction legislation, which would establish a national emission trading system

3. Origin of issue

Board or Commission Sustainability Commission

4. Staff effort required to conduct study Moderate

Briefly explain the level of staff effort required

A consultant could be utilized to identify the necessary resources and scope of data to conduct a GHG inventory. This would reduce the amount of staff time to research what is available and the most efficient systems for data collection tools. Staff would evaluate the options provided by the consultant and initiate the RFP process which would facilitate the City's study. Since there is significant competition in this field the RFP process would likely yield proposals that include capabilities, capital and operating costs associated with resource tracking and providing the City the information necessary to decide further action.

5. **Multiple Year Project?** No **Planned Completion Year** 2012

6. **Expected participation involved in the study issue process?**

Does Council need to approve a work plan? No

Does this issue require review by a Board/Commission? Yes

If so, which? Sustainability Commission

Is a Council Study Session anticipated? No

7. **Briefly explain if a budget modification will be required to study this issue**

Amount of budget modification required 30000

Explanation

Financing is required for consultant services to identify software options, data collection scope and evaluate the feasibility of the options. \$30,000 to be appropriated from grant funds received.

8. **Briefly explain potential costs of implementing study results, note estimated capital and operating costs, as well as estimated revenue/savings, include dollar amounts**

Are there costs of implementation? Yes

Explanation

Staff does not have the tools to collect and monitor Community GHG measures. This study would identify the potential capital and operating costs incurred by the City if it were to conduct a greenhouse gas inventory annually. Various options and the costs associated with the purchase of an off-the-shelf or customized GHG tracking tool and operating expenses would be determined for ongoing staff support based on the identified option. The study would also identify any ancillary expenses including licensing and subscription fees, service agreements or other costs required for ongoing support to implement the study recommendation. Cost savings may be realized through the capacity of the City to conduct its own GHG analysis and avoid hiring a consultant to conduct the analysis in the future. Some savings may also be realized by having an increased ability to identify and target energy and cost savings opportunities identified through the tool. Costs may be reduced or offset through an RFP process. There are many vendors providing services related to this area who could submit proposals identifying the scope and cost of various GHG Inventory options.

9. **Staff Recommendation**

Staff Recommendation Support (Subject to grant funding)

If 'Support', 'Drop' or 'Defer', explain

Staff supports the study contingent on grant funding. The study facilitates the City's efforts to evaluate data necessary to show compliance with Climate Action Plan goals and policies facilitating the CEQA streamlining process. By identifying the appropriate options the

City can also target areas that will achieve the greatest level of impact for cost savings and greenhouse gas reductions. The two original study issues have been combined because the data sets are similar, if not identical for each of the studies. It would therefore make more sense to identify one tool that could achieve the goals of both study issues. Staff also recommends that this study be conducted after the adoption of the CAP, since the CAP policies will better define the data collection needs of the tool.

Reviewed by



Department Director

11-7-11

Date

Approved by



City Manager

11-8-11

Date