



City of Sunnyvale

Agenda Item

14-0924

Agenda Date: 1/30/2015

2015 COUNCIL STUDY ISSUE

NUMBER

ESD 14-04

TITLE Full Cost-Analysis and Carbon Pricing in City Operations

BACKGROUND

Lead Department: Environmental Services Department
Support Department(s): N/A

Sponsor(s):

Board/Commission: Sustainability Commission

History:

1 year ago: Deferred

2 years ago: N/A

SCOPE OF THE STUDY

What are the key elements of the study?

In the evaluation of various options for choices made in city operations, the true cost of the alternatives does not monetize the environmental impacts as part of the analysis. For instance, in evaluating various vehicles purchases, the lifecycle cost used does not monetize environmental impacts; rather they are treated separately and somewhat optionally as quality measures. Clearly, as the climate changes, we are recognizing that there are economic impacts associated with the choices made, but those costs have not been related directly back to the actions.

Recently, James Hanson (former NASA director) suggested that measures of CO₂e can be used as one of these criteria. Dr. Hanson recommended that, today, a cost of \$20/metric ton of CO₂e be used, and that the cost be increased year by year at a rate greater than inflation until it reaches \$100/MTCO₂e at current currency rates. His recommendation was that for now a 6% increase per year would be sustainable and appropriate until that \$100 figure is achieved. (At \$100/MTCO₂e, if applied to gasoline, one gallon would cost roughly \$1.00 more over current prices.) Barbara Boxer, sponsor of Climate Protection Act S. 322 and Steven Chu, former Energy Secretary, both of California, have agreed that monetizing decisions is the single most effective way to rationalize environmental controls.

This study issue combines two related study issues proposed by the Sustainability Commission that would identify what the City can do to 1) determine, in monetary terms, the relative environmental impacts and comprehensive, true lifecycle costs of operational decisions and determine how these environmental costs can be factored into the City's decision making process, and 2) establish a reasonable price for carbon emissions (in \$/ton carbon over the lifecycle of the product) to be

factored in when the City purchases vehicles and major equipment.

The study would develop the procedures and practices necessary to incorporate the environmental costs and price of carbon purchasing decisions starting with major purchases such as vehicles or major equipment. As part of this study, staff would determine:

- Operational activities where monetization would be required
- Basic methods and techniques to be used in regard to associating costs to GHG emissions, including a price for carbon
- Identify examples of recently implemented decisions that may be used as learning experiences by providing a contrasting analysis to decisions planned but not yet implemented
- Identify how existing carbon trading regulations might impact City operations in the future

What precipitated this study?

This study was proposed by the Sustainability Commission.

Planned Completion Year: 2015

FISCAL IMPACT

Cost to Conduct Study

Level of staff effort required (opportunity cost): Major

Amount of funding above current budget required: \$25,000

Funding Source: Will seek budget supplement.

Explanation of Cost:

If approved, costs associated with this study will be for consultant services to research this monetization concept and how it would apply to operational activities. Staff time would be associated with the consultant selection process and review of future impacts on City operations based on the consultant's work. Because the study includes the determination of a pricing value for carbon in purchasing decisions, it is anticipated that whatever price is determined will raise the City's cost of purchases (for lower carbon-emitting products or services) compared to current purchasing procedures.

Cost to Implement Study Results

Unknown. Study would include assessment of potential costs.

EXPECTED PARTICIPATION IN THE PROCESS

Council-approved work plan: No

Council Study Session: No

Reviewed by Boards/Commissions: Sustainability Commission

STAFF RECOMMENDATION

Position: Drop

Explanation: Staff recommends dropping this study issue. Since proposal of this study issue, the Council has adopted the City's Climate Action Plan, which establishes the policy and program activities needed to achieve targeted reductions in greenhouse gas emissions. This Plan substantially provides for the decision making guidance sought as an outcome of this study; therefore, a separate study is no longer needed.

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