

2014 Proposed Council Study Issue

ESD 14-01: Ban on the Use of Gas-powered Leaf Blowers

Lead Department Environmental Services Department

Sponsor(s) Sustainability Commission

History 1 year ago: 2 years ago:

1. **Scope of the Study**

a. What are the key elements of the study?

This study issue would examine banning two-cycle gasoline leaf blowers in the City. While popular among landscape management businesses and professionals, gas blowers are a major source of both air and noise pollution in Sunnyvale.

The California Air Resources Board (CARB) documents that gas leaf blowers emit 500 times the amount of hydrocarbons and 26 times the amount of carbon monoxide compared with newer cars. CARB also found that leaf blowers emit 8-49 times the particulate matter of a light duty vehicle. In addition to pollution from toxic exhaust fumes, gas leaf blowers blow mold, pollen, animal feces, pesticides and fertilizers into the air. Particulate matter remains suspended in the air for hours and is so small that it is easily assimilated into the lungs.

The Bay Area Air Quality Management District recommends nine things the public can do to make clean air choices every day. One of those is to “avoid using gas powered lawn mowers and leaf blowers.”

California cities that have banned or restricted gas leaf blowers include Berkeley, Belvedere, Claremont, Del Mar, Indian Wells, Laguna Beach, Lawndale, Los Altos, Menlo Park, Malibu, Mill Valley, Piedmont, Santa Monica, Hermosa Beach, West Hollywood, Palo Alto and Los Angeles. Citizens in other cities such as Orinda and St Helena are working toward banning gas leaf blowers.

b. What precipitated this study?

This study issue was proposed by the Sustainability Commission.

c. Is this a multiple year project? No Planned Completion Year 2014

2. **Fiscal Impact**

a. Cost to Conduct Study

i. Level of staff effort required (opportunity cost)

Major Moderate Minor

ii. Amount of funding above current budget required \$

Will seek budget supplement Will seek grant funding

iii. Explanation of Cost:

The cost associated with this study would be the result of staff time to study, craft an ordinance and conduct outreach to the community. It is anticipated that the study can be incorporated as part of staff's annual workplan.

b. Costs to Implement Study Results

- No cost to implement.
- Unknown. Study would include assessment of potential costs.
- Some cost to implement. Explanation:

Minimal costs can be expected for outreach to local landscape maintenance businesses and professionals, property management companies, businesses and residents and will be dependent on the type and level of outreach conducted.

3. **Expected participation in the process**

- Council-approved work plan
- Council Study Session
- Board/Commission Review by the Sustainability Commission

4. **Staff Recommendation**

a. Position:

b. Explanation:

ESD 14-02 Community Choice Aggregation

Lead Department Environmental Services Department

Sponsor(s) Sustainability Commission

History 1 year ago: 2 years ago:

5. **Scope of the Study**

a. What are the key elements of the study?

In creation of the Sunnyvale Draft Climate Action plan, it was identified that electric energy was the 2nd largest (after transportation) factor in GHG emissions in the city. As part of this same study-work, consultants identified that the city participating in Community choice Aggregation (CCA) would likely achieve over 50% of the targeted emission reduction goal.

This study would quantify multiple unknowns:

- Which communities would likely join and partner in a CCA
- The costs and risks to the City participated in a comprehensive study of how a CCA would be established
- The actions of the Draft Climate Action plan that might be assigned in the charter of a CCA to facilitate emission reductions
- How would a CCA best be established (what agency or founding of an agency must lead the effort)

b. What precipitated this study?

This study was proposed by the Sustainability Commission. The City has created a Sustainability Commission CCA Subcommittee that has been researching CCA since August 2012. The Subcommittee performed extensive research on CCA and created a presentation that has gone

before staff in preparation for an informational meeting with the City Council in conjunction with the draft Climate Action Plan.

The Subcommittee has been following the progress of cities in Marin County who have been participating in a CCA for over 2 years and have experienced better than predicted results. The County of Sonoma, after issuing RFPs for its planned CCA, has found that response and costs for CCA are more attractive than forecast. San Francisco City/County has initiated operation of its CCA, CleanPowerSF.

The Subcommittee has found the potential for the City of Sunnyvale to make a major reduction of GHG emissions through establishment and participation in a CCA seems strong.

c. Is this a multiple year project? No Planned Completion Year 2014

6. **Fiscal Impact**

a. Cost to Conduct Study

i. Level of staff effort required (opportunity cost)

Major Moderate Minor

ii. Amount of funding above current budget required \$30,000

Will seek budget supplement Will seek grant funding

iii. Explanation of Cost:

The cost associated with this study would be a preface to a full feasibility study on CCA. This study seeks to identify potential cost sharing partners interested in participating in the establishment of a CCA in the South Bay, identify the costs and risks Sunnyvale might have if it participated and develop a comprehensive outline of how a CCA would be established.

b. Costs to Implement Study Results

No cost to implement.

Unknown. Study would include assessment of potential costs.

Some cost to implement. Explanation:

7. **Expected participation in the process**

Council-approved work plan

Council Study Session

Board/Commission Review by: Sustainability Commission

8. **Staff Recommendation**

a. Position:

b. Explanation:

ESD 14-03 Full Cost-Analysis in City Operations

Lead Department Environmental Services Department

Sponsor(s) Sustainability Commission

History 1 year ago: 2 years ago:

9. **Scope of the Study**

a. 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. 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 CO_{2e} can be used as one of these criteria. Dr. Hanson recommended that today a cost of \$20/metric ton of CO_{2e} be used and that the cost be increased year by year at a rate greater than inflation until it reaches \$100/MTCO_{2e} 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/MTCO_{2e}, if applied to gasoline, one gasoline would cost roughly \$1.00 more over current prices.)

Barbara Boxer (Climate Protection Act S. 322) and Steven Chu, both of California, have agreed that monetizing decisions is the single most effective way to rationalize environmental controls.

This study issue that would identify how decisions would be evaluated and what the City can do to determine, in monetary terms, the relative environmental impacts and comprehensive, true lifecycle costs of decisions made by the City.

As part of this study the 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.
- Identify examples of recent decisions that may be used as learning experiences by providing a contrasting analysis to ones that has been planned but not yet implemented
- Identify how existing carbon trading regulations might impact City operations in the future

b. What precipitated this study?

This study was proposed by the Sustainability Commission

c. Is this a multiple year project? No Planned Completion Year 2014

10. **Fiscal Impact**

a. Cost to Conduct Study

i. Level of staff effort required (opportunity cost)

Major Moderate Minor

ii. Amount of funding above current budget required \$

Will seek budget supplement Will seek grant funding

iii. Explanation of Cost:

Costs associated with this study will be the result of staff time to research this monetization concept and how it might apply to City operations. Staff time will be necessary to identify operational activities, research methods and techniques for quantifying the CO_{2e} content of operational decisions, an associated CO_{2e} value of operational decisions and how carbon trading regulations may impact City operations in the future.

maintained; and portions of the City's right of way that are currently residential streets approved for a road diet.

This study issue would look at how the City can get more trees planted, including entering into a partnership with Our City Forest. This study would examine options for preserving and expanding Sunnyvale's urban canopy as properties are developed or re-developed. The study would identify how a partnership with Our City Forest can help the City identify specific areas of the City available for replacement trees of various sizes and characters, recommend incentives/subsidies for tree planting that could be funded with the proceeds from an in lieu fee, set goals for the net increase of tree cover, propose metrics to monitor progress toward the goals and provide outreach and education to residents.

b. What precipitated this study?

This study was proposed by the Sustainability Commission. The Commission received public comment on multiple occasions regarding preserving and expanding the City's urban canopy.

c. Is this a multiple year project? No Planned Completion Year 2014

14. Fiscal Impact

a. Cost to Conduct Study

i. Level of staff effort required (opportunity cost)

Major Moderate Minor

ii. Amount of funding above current budget required \$

Will seek budget supplement Will seek grant funding

iii. Explanation of Cost:

The cost associated with this study would be minor because the City currently has an Urban Forestry Management Plan that identifies many of the factors of the study. City staff has engaged Our City Forest in the past. If the City were to partner with Our City Forest there would be a cost associated with the partnership and dependent on the level of engagement in Sunnyvale.

b. Costs to Implement Study Results

No cost to implement.

Unknown. Study would include assessment of potential costs.

Some cost to implement. Explanation:

15. Expected participation in the process

Council-approved work plan

Council Study Session

Board/Commission Review by Sustainability Commission

16. Staff Recommendation

a. Position:

b. Explanation:

ESD 14-05 Reduction of Excessive Lighting in the Downtown Area

Lead Department Environmental Services Department

Sponsor(s) Sustainability Commission

History 1 year ago: 2 years ago:

1. **Scope of the Study**

a. What are the key elements of the study?

This study issue is to study the impact of reducing excessive lighting on the Mathilda Overpass, Sunnyvale Avenue, and elsewhere in the downtown area so that it gives the right message to the community.

Sustainability Commissioners have commented on several occasions that the lighting appears excessive and that there are too many lights in the downtown area. The Commission has expressed that the number and type of lights gives the wrong message to the public and has inquired on numerous occasions about what can be done for some kind of energy efficient retrofit of the lights, removing half of the bulbs or even removing streetlights. It has been communicated that the decision to turn lights off downtown affects a number of stakeholders and approved Council documents. As such staff would need policy direction from the Council to pursue the concept.

This study would identify the stakeholders and Council documents addressing any decision to turn lights off downtown, alternatives for reducing excessive lighting, identifying the appropriate lighting standards and identifying the impact for reducing lighting in the referenced downtown area.

b. What precipitated this study?

This study issue was proposed by the Sustainability Commission and has been the topic of discussion at multiple meetings.

c. Is this a multiple year project? No Planned Completion Year 2014

2. **Fiscal Impact**

a. Cost to Conduct Study

i. Level of staff effort required (opportunity cost)

Major Moderate Minor

ii. Amount of funding above current budget required \$

Will seek budget supplement Will seek grant funding

iii. Explanation of Cost:

The cost associated with this study would be from staff time to research existing Council documents, surveying stakeholders regarding impacts to streetlight reduction, identifying lighting standards and alternatives and the impacts of reducing street lighting on the Mathilda Overpass, Sunnyvale Avenue and downtown area.

b. Costs to Implement Study Results

No cost to implement.

Unknown. Study would include assessment of potential costs.

Some cost to implement. Explanation:

3. **Expected participation in the process**

- Council-approved work plan
- Council Study Session
- Board/Commission Review by:
Sustainability Commission
Planning Commission

4. **Staff Recommendation**

a. Position:

b. Explanation:

ESD 14-06 Financing for Energy-Efficiency, Renewable-Energy and Water-Efficiency Improvements on Commercial Properties

Lead Department Environmental Services Department

Sponsor(s) Sustainability Commission

History 1 year ago: 2 years ago:

1. **Scope of the Study**

a. What are the key elements of the study?

According to the U.S. Environmental Protection Agency an average of about 30% of the energy used in commercial buildings is wasted, resulting in higher costs to businesses for energy than necessary. The price of solar power is declining, creating opportunities for long-term savings. The price of water is increasing. Unemployment remains above historic levels. Sunnyvale's Community GHG inventory, completed as part of the Horizon 2035 process, indicated that our commercial and industrial sector accounts for 39% of our city's total GHG emissions, the largest contribution from any single source.

The upfront investment needed to implement energy and water-efficiency measures and install renewable energy systems is often cited as the reason more businesses do not pursue energy-efficiency, renewable energy and water-efficiency projects, despite the potential for long-term financial savings. To surmount the initial investment barrier, many jurisdictions throughout the country and in California have implemented on-bill financing programs. Such completely-voluntary programs lend businesses money for energy-efficiency, renewable-energy and water-efficiency projects at no up-front cost to the business owner. The source of the loans is either private lenders or bonds floated by the jurisdiction--not the jurisdiction's general fund. These "loans" are not counted toward debt-load of a business because the debt obligation stays with the property if a property is sold. On-bill financing programs are expected to result in immediate cash-flow benefits to the business.

The lack of such a program could disadvantage Sunnyvale's businesses as compared to businesses in jurisdictions that have on-bill financing programs, including San Francisco, Sacramento, Los Angeles, Western Riverside County, and Sonoma County. Further, the absence of an on-bill financing program may be depriving our city of jobs that could be expected from an

increased number of commercial building retrofits (engineers, commissioning agents, energy managers, building operators, and installers).

This study would research the feasibility of implementing an on-bill financing program in Sunnyvale--advantages, disadvantages, and any risks. The study will include evaluation of organizations that provide turnkey Property Assessed Clean Energy (PACE) financing. The study will also evaluate the possibility of the City acting as the lender and financing improvements to be paid back through utility bills, much like PG&E does for qualified upgrades. This study would include a recommended pathway toward setting up an on-bill financing option for Sunnyvale businesses, including a preferred method of financing the loans and any associated costs to the City.

b. What precipitated this study?

This study issue was proposed by the Sustainability Commission.

c. Is this a multiple year project? No Planned Completion Year 2014

2. **Fiscal Impact**

a. Cost to Conduct Study

i. Level of staff effort required (opportunity cost)

Major Moderate Minor

ii. Amount of funding above current budget required \$

Will seek budget supplement Will seek grant funding

iii. Explanation of Cost:

iv.

The cost associated with this study is associated with staff time. It is anticipated that the study can be incorporated as part of staff's workplan.

b. Costs to Implement Study Results

No cost to implement.

Unknown. Study would include assessment of potential costs.

Some cost to implement. Explanation:

3. **Expected participation in the process**

Council-approved work plan

Council Study Session

Board/Commission Review by: Sustainability Commission

4. **Staff Recommendation**

a. Position:

b. Explanation: