



DATE: October 9, 2017

AGENDA ITEM # 3

TO: Environmental Commission

FROM: J. Logan, Staff Liaison

SUBJECT: Review and Discuss 2017/18 Environmental Commission Goals and Work Plan

BACKGROUND

The Environmental Commission met with the City Council on May 2, 2017 to review its 2016/17 Environmental Commission Accomplishments and Draft 2017/18 Goals and discuss issues and project for the upcoming year. Based on this discussion, the Goals were finalized and the 2017/18 Work Plan was developed and approved by Council. The approved Work Plan is intended to focus the Commission's agenda items and will serve as a roadmap for projects and activities for the year.

DISCUSSION

Environmental Commission Goals and resulting Work Plan development targeted for 2017/18 are:

1. Climate Action Plan and Community Choice Energy
2. Water Conservation and stormwater management
3. Solid waste diversion
4. Visioning process
5. Community outreach
6. Special projects as assigned by Council

The Commission will review the Goals, projects and status updates at each of its monthly meetings and take action as appropriate.

Attachments:

- A. October 9, 2017- 2017/2018 Goals and Work Plan
- B. Anti-idling Subcommittee Report

ENVIRONMENTAL COMMISSION

2017/18 Work Plan

October 9, 2017

Goal	Projects	Assignments	Target Date	City Priority related to	Status
Climate Action Plan & CCE	Community outreach and education for the implementation of CCE and SVCEA	<ul style="list-style-type: none"> Speakers and SVCE staff outreach efforts for residential and business (Bray, Teksler, Hedden) 	Ongoing	Climate Action Plan Goals and CCE-SVCE implementation	<ul style="list-style-type: none"> Downtown Green event, August 20, 12-4pm; 8/2 & 8/4 Senior Center presentation by SVCEA staff
	Resource to Director Bruins	<ul style="list-style-type: none"> Policy & Program guidance (Teksler, Hedden, Weiden) 	Monthly	Climate Action Plan Goals and CCE-SVCE implementation	<ul style="list-style-type: none"> Review SVCE packet and recommendations to Director Bruins as needed; request specific clarification from Dir. Bruins
	Provide assistance as directed by Council	<ul style="list-style-type: none"> TBD (Name of Commissioner assigned) 	As assigned by Council	Climate Action Plan Goals and CCE-SVCE implementation	<ul style="list-style-type: none"> MAWG rep to update Dir. Bruins ahead of BOD meetings
	Energy efficiency measure for community	<ul style="list-style-type: none"> Commission to explore and research programs offered by PG&E, Acterra, Energy Upgrade California, CA First (Hedden) 	Oct. 2017 workshop with SCCo Office of Sustainability	Climate Action Plan Goals and CCE-SVCE implementation	<ul style="list-style-type: none"> Home Upgrade Workshop on Oct. 18, 2017 PG&E streetlight replacement beginning late September 2017
	Research best practice for green building codes and planning requirements	<ul style="list-style-type: none"> Commission to engage with staff to research and recommend areas to be reviewed (EV, solar installs, green building measures) (Yuan, Teksler, Halkola) 	Final report approved; sent to CD staff for review and comments	Climate Action Plan Goals and CCE-SVCE implementation	<ul style="list-style-type: none"> Initial Staff meeting Aug. 16, 2017 Staff shared report with SVCE MAWG at Sept 27, 2017 meeting Staff researching consultants or partnering agencies

Climate Action Plan & CCE (cont.)	With staff, support opportunities for CAP GHG reduction measures.	<ul style="list-style-type: none"> Commission to support staff's efforts to update CAP with inventory & review of measures 	Quarterly	Climate Action Plan Goals and CCE-SVCE implementation	CAP Report with analysis of measures and data in CIP Budget; staff attend Sustainability Managers' Roundtable meetings
	Environmental Resources Dashboard	<ul style="list-style-type: none"> Review and enhance GHG reporting and data on Green Initiatives pages of City website (Bray, Eyre, Halkola) 	In process	Climate Action Plan Goals and CCE-SVCE implementation	Data collection ongoing. Dashboard updated with data through 2015, 2016 if available
	Anti-Idling Effort	<ul style="list-style-type: none"> Subcommittee formed (Hedden, Yuan, Weiden) 	<p>Discussion on 8-14-17</p> <p>Meeting with staff 8-25-17</p> <p>Update 9-11-17</p> <p>Meeting with staff 9-18-17</p> <p>Update 10-9-17</p>	Climate Action Plan Goals and CCE-SVCE implementation	<ul style="list-style-type: none"> Research existing ordinances and enforcement Research educational campaign Discuss regional education effort
Water Conservation & Stormwater Management	Support community and municipal drought related measures	<ul style="list-style-type: none"> Reported by (Eyre) Track water usage via ER Dashboard (Eyre, Bray) Support staff in development of green infrastructure measures (Eyre) 	Summer/Fall focus with ongoing review	Water Conservation Resolution 2015-15	<ul style="list-style-type: none"> Monitor water use Update drought website CalWater presentation 9-11-17
	Stormwater management/shoulder paving policy	<ul style="list-style-type: none"> Assist staff and review development of storm water plans and reporting (Weiden, Bray, Halkola) 	Subcommittee meetings, staff reports	Stormwater Master Plan and Water Conservation	Shoulder paving policy revisions
Solid Waste Diversion	Review of progress toward diversion goals Focus on composting	<ul style="list-style-type: none"> MTWS Annual review Explore opportunities with staff for public outreach (Weiden, Yuan) 	Compost available for community	Recycling and diversion	<ul style="list-style-type: none"> Schedule of compost deliveries and outreach to community Update on event recycling

Visioning Process	Provide environmental perspective to assist visioning process	<ul style="list-style-type: none"> TBD (Name of Commissioner assigned) 	Hillview CC	Provide support to Task Force and Council on natural and built environment	<ul style="list-style-type: none"> Participate in discussion on environmental impacts Recommendations sent to Task Force City Council supported recommendation to upgrade to LEED Gold equivalent
Community Outreach	Support project implementation by public outreach and education efforts	<ul style="list-style-type: none"> City webpages; social media; engage with community groups (Name of Commissioner assigned) Invite speakers to EC meetings on Work Plan related topics (All Commissioners) 	Ongoing		Partnership with GTLA, SVCEA, community non-profits, community organizations, County Office of Sustainability
Special Projects	As assigned by Council	Research and report on membership for City in Mayor's National Climate Action Agenda	July 2017	Climate Action Plan. Request from Mayor Prochnow	Mayor signed letter; Commissioner Weiden to follow activities of the organization
		Research and report on Santa Clara County Climate Resolution	October 2017	Climate Action Plan. Request from City Council	EC to review and compare County Resolution and Resolution for Climate Restoration and provide recommendation at Oct 9 meeting



TO: Environmental Commission

FROM: Anti-idling Subcommittee (Commissioners Hedden, Yuan, and Weiden)

SUBJECT: Anti-idling Subcommittee Report

Activities since appointment by the Environmental Commission on August 14, 2017:

- August 25, 2017 Gary Hedden and Don Weiden met with J. Logan and Sarah Henricks – Discussed and identified items to be investigated.
- September 1, 2017 Gary Hedden, Lei Yuan and Don Weiden met with Sarah Henricks – Continued discussion of items to be investigated. Sarah confirmed that the City could post anti-idling signs without an ordinance if approved by Public Works.
- September 6, 2017 Lei Yuan met with Sybil Cramer of the Los Altos High School Green Team and Cheryl Weiden – Sybil stated that the Green Team selects their activities. Sybil believes the School District will take action including posting signs and enforcing anti-idling if the City provides some direction.
- September 11, 2017 – Subcommittee report to Environmental Commission.
- September 18, 2017 met with J. Logan and Sarah Henricks – Custom signs would cost \$200 to \$250 each depending on size and graphics. Installation cost could be nominal if done by City crews on existing posts. Additional costs exist for maintenance of signs. The Chief of Police spoke with the Mountain View/Los Altos High School District and Los Altos Elementary School Superintendents and found support for educational efforts and potential inclusion in Drivers Education program. Gary Hedden contacted Joe Simitian's office and found his staff willing to discuss and evaluate the subject. A meeting with a member of Simitian's staff is scheduled for October 10, 2017.

Estimate of Mt CO₂ Idling Prevention for Los Altos

1. City of Palo Alto Colleagues Memo dated August 28, 2017 – Factoring private vehicle estimate of Mt CO₂ prevented by population of Los Altos to population of Palo Alto yields 271 to 542 Mt CO₂.
2. Vanderbilt University Paper titled Costly myths: An analysis of idling beliefs and behavior in personal motor vehicles and dated March 4, 2009 – Factoring private vehicle estimate of Mt CO₂ prevented by number of private vehicles in US to number of vehicles in Los Altos yields 390 Mt CO₂.
3. We have not been able to find other references that present methods for estimating the Mt CO₂ prevented by anti-idling education and ordinances.

Conclusion, Recommendation and Next Steps

1. We conclude that reduction of private vehicle idling in Los Altos may significantly reduce CO2 admissions, improve air quality, and assist in reaching goals of the Climate Action Plan.
2. We recommend that the Environmental Commission support the following actions and next steps:
 - a. Identify potential idling hot spots (near schools, along Main and State Streets, downtown parking lots, etc.) and conduct surveys of the idling behavior of private vehicle drivers. Sample survey sheet follows references.
 - b. Continue research of potential regional support through Joe Simitian's staff and City Manager's Forum.
 - c. Continue discussions with Los Altos School Representatives (High School and K-8) and Police Department.
 - d. Evaluate collected survey data, research and discussions and recommend appropriate next steps at a future Environmental Commission meeting. Next steps could include identifying and pursuing idling reduction opportunities, trial of idling reduction opportunities at a selected location(s), support of regional action, local resolution or ordinance or no action.

References

1. [City of Palo Alto Memo dated August 28, 2017](#) –Presents rationale for adoption of an Anti-Idling ordinance by Palo Alto.
2. Vanderbilt University Paper titled [Costly myths: An analysis of idling beliefs and behavior in personal motor vehicles](#) and dated March 4, 2009 – One of the most widely referenced study on human private vehicle idling behavior.
3. [Improving Toronto's idling control bylaw](#), McKowen, Toronto Medical Officer of Health, Environmental Protection, 2010 - The article has good information on the background of idling, Toronto's groundbreaking ordinance and developments and improvements since its passage. Referenced research concludes that turning engine off and on is better than idling for more than 10 seconds.
4. [Comparisons of Discretionary Passenger Vehicle Idling Behavior by Season and Trip Stage with Global Positioning System and Onboard Diagnostic Devices](#), J Dowds, J Sullivan, - This study addresses the comparisons of discretionary passenger vehicle idling by using field data collected from 20 volunteers in Vermont. Each volunteer participated in two 2-week data collection periods, one in the summer and one in the winter. Overall, 15.6% of vehicle-operating time was spent idling, consistent with the limited existing data on this topic. In addition, the paper describes a processing method used with an in-vehicle Global Positioning System and onboard diagnostic data that allows discretionary idling at the start and end of trips to be separated from the in-travel idling related to traffic or traffic control. Discretionary idling accounted for more than 6.5% of vehicle operating time. Discretionary winter idling events were found to be longer than summer idling events and, for idling events greater than 60 s, trip-start idling was found to be longer than trip-end idling. Both of these results reaffirm previous findings suggesting that there are opportunities for behavioral changes to reduce idling. The method used to extract discretionary idling is promising for widespread use and large sample data collection efforts. This method will be critical for the many communities that lack robust idling data when considering the costs and benefits of idling behavior change initiatives. Note, compare Discretionary Idling / Total Idling = 6.5 / 15.6 = 0.42 with Vanderbilt Study (Unnecessary Idling / Total Idling = 5.8 / 16.1 = 0.36).

5. [Eco-driving: An overlooked climate change initiative](#), JN Barkenbus - Energy Policy, 2010 – Elsevier - The actions individuals can take to mitigate climate change are, in the aggregate, significant. Mobilizing individuals to respond personally to climate change, therefore, must be a complementary approach to a nation's climate change strategy. ECO driving includes anti-idling behavior.
6. [The Policies Needed to Reduce US Petroleum Consumption and Greenhouse Gas Emissions](#), AMITE Initiative, 2009, - Reducing petroleum consumption and GHG emissions from cars and light-duty trucks in the United States over the next several decades requires that we implement a clear and coordinated set of policies now. This report describes a portfolio of policies (vehicle gas mileage regulations, vehicle taxes, gas taxes, etc) that can reduce fuel consumption and GHG emissions. Recommends driver education on driving practices to achieve gas savings.
7. [Influence of Fuel Consumption and Instantaneous Exhaust Pollutants on Euro 4 Gasoline Vehicles at Traffic Signalized Intersections: Idling and Start/Restart](#), A Sharma, M Singh, S Sharma - International Journal of ..., 2017, - Despite the more contribution of personal vehicles and transportation automobiles to environmental change, diminutive work has been done to overcome the arising issue regarding exhaust pollutants and fuel consumption. Research found that turn off and on is better than idling for more than 10 seconds.

Sample Survey Sheet

Name of the project agent: _____ Location: _____ Date: _____ Time: Start time: _____ End time: _____ Weather conditions (in general): _____ Temperature _____ Sunny Raining Overcast Snowing Humid weather	How to identify an idling vehicle <ol style="list-style-type: none"> 1. See if exhaust fumes are coming out of the tail pipe 2. Listen to the engine noise 3. See if the vehicle is vibrating 4. Detect the smell of the exhaust fumes 5. See if the headlights are turned on
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Description of the vehicle	Is the engine idling? (Y/N)	Time of agent arrival	Departure time, or time when the engine was turned off	Duration of idling	Driver's gender (F/M)	Comments: 1 – the driver is reading in the car 2 – the driver is listening to the radio 3 – the driver is looking around 4 – other (explain)