

## Chemical Free --Save our Planet and Create a Healthy Life

Going green is about making different choices that are healthier and chemical free. It creates greater joy for every living being, and that will sustain a better planet for generations to come. Here are a few suggestions:

### 1. BPA free plastics

Some of the plastic storage containers contain Bisphenol A (BPA), ingredients that have been shown to mimic hormones and which have been linked to several health concerns. BPA is also found in canned food, bottled water and plastic storage containers. **3 plastics that contain BPA are identified with recycling symbols 3, 6, 7.**

### 2. Chemical cleaners

Chemical cleaners and toxic ingredients such as disinfectant bleach, chlorine or anti-bacteria soaps, which may be harmful to humans.

*[Triclosan is an anti-bacterial chemical found in many consumer products, and it's nearly ubiquitous in liquid hand soap. It is linked to liver and inhalation toxicity, and even low levels of triclosan may disrupt thyroid function. It is one of the top chemicals to avoid, which may encourage bacterial resistance to antibiotics. Ref:*

*<http://www.ewg.org/triclosanguide>]*

Use non-toxic and green cleaning supplies or make your own with simple ingredients like baking soda, borax, lemon juice and vinegar.

### 3. Chemicals in cosmetics

Most cosmetics contain chemical products like phthalates and parabens, both of which are endocrine disrupting chemicals that have been linked to an increased risk of cancer and other health problems. Get a list of harmful chemical index on: <http://www.ewg.org/chemindex>

The average woman encounters 168 chemical ingredients in her beauty regimen every day, men with an average of 85 chemicals. With 90% of the 10,500 different chemicals used in personal care products never evaluated by the Food and Drug Administration for safety, it has an effect on our health and plus, some of these chemicals can harm the environment, too.

Numerous products such as shampoos, lotions, bath products, cleaning sprays, air fresheners and laundry and dishwashing detergents, also contain strongly scented ingredients that are known as "fragrance" or "artificial fragrances" that present potential health risks.

#### **Beauty products - unsafe ingredients:**

Ref: [http://www.thedailygreen.com/living-green/natural-beauty-cosmetics/toxic-beauty-products?click=main\\_sr](http://www.thedailygreen.com/living-green/natural-beauty-cosmetics/toxic-beauty-products?click=main_sr)

- **Petrochemicals**

Examples include petroleum jelly, isopropyl alcohol or isopropanol, methyl alcohol

or methanol, butyl alcohol or butanol, ethyl alcohol or ethanol (often used in skin astringents and perfumes or colognes).

- **Sodium laureth/lauryl sulfates** and other sulfate-based detergents  
Examples include sodium lauryl ether sulfate; sodium laurethsulphate; sodium lauryl ether sulphate (most commonly used in shampoos, shower gel, bubble bath)
- **Propylene glycol and polyethylene glycol**, along with various ingredients formulated with PEGs and PGs  
Examples include ethylene glycol (used in firming lotions) and propylene glycol (found in everything from deodorant, mascara, baby powder, after shave and more).
- **Formaldehyde &paraben preservatives**  
Examples include butylparaben, ethylparaben, methylparaben, propylparaben (found in sunscreen, shampoos, shaving gel, toothpaste and more)
- **Synthetic dyes**  
Examples include anything with F&DC preceding it, usually followed by a color and a number. (F representing food, D&C representing drugs and cosmetics), other color additives, including caramel, lead acetate, manganese violet, and more.
- **Artificial fragrances**  
Avoid most perfumes/colognes, which legally aren't required to list ingredients to protect their trade mark

#### **Toxic Trio (DBP, Toluene and Formaldehyde) in Nail Polish**

Ref: <http://www.thedailygreen.com/living-green/natural-nail-polishes#fbindex2>

- **Dibutyl phthalate (DBP)**: A possible trigger of asthma attacks, this phthalate may have association with developmental and reproductive effects and cancer in lab animal testing. It may also be associated as a potent hormone disruptor that affects the male reproductive system most dramatically.
- **Toluene**: It is a solvent, also found in gasoline that can cause dizziness and short term intoxication. Like DBP, it is a volatile chemical that can be inhaled and absorbed through the skin and nails. It could also be listed on the label as "toluol" or "phenylmethane."
- **Formaldehyde**: Considered a human carcinogen by U.S. health agencies, it is "an irritating chemical that people have allergic reactions to". Also, known as formalin.
- **"DBP-free" and "toluene-free"**: Look for "DBP-free" and "toluene-free" products

#### **Titanium Oxide in Sunscreens**

Ref: [http://www.thedailygreen.com/environmental-news/latest/nanotechnology-sunscreens-47082101?click=main\\_sr](http://www.thedailygreen.com/environmental-news/latest/nanotechnology-sunscreens-47082101?click=main_sr)

Many sunscreens contain the active ingredient titanium oxide. Also, increasingly, sunscreen makers are using nanomaterials -- man-made substances that are engineered at the atomic or molecular scale and should be avoided.

#### **4. Dry Cleaning Chemicals**

Perchloroethylene (also called PCE or PERC) is one of the most common chemical used at dry cleaning shops. It is also used in some carper cleaners and spot removers. PERC accumulates in our body fat and may therefore remain in our bodies for long periods of time. And it can have long-term effects on our health, including cancer, skin irritation, dizziness and headaches.

Ref: [http://www.thedailygreen.com/environmental-news/breast-cancer-risk-factors/prevent-breast-cancer-dry-cleaning-47100113?click=main\\_sr](http://www.thedailygreen.com/environmental-news/breast-cancer-risk-factors/prevent-breast-cancer-dry-cleaning-47100113?click=main_sr)

#### **5. Pesticides**

Many common pesticides (such as ant, roach and mice poisons) contain endocrine disrupting chemicals that can harm human health and have been linked to a variety of human diseases.

#### **6. Weed Killers**

Herbicides do more than kill weeds; some may mimic hormones. Many common herbicides (weed killers) have been linked to a variety of human diseases. Several herbicides are known endocrine disruptors (they disrupt natural hormone-signaling pathways); endocrine disrupting chemicals have been implicated in increased risk for cancer, as well as other health problems.

#### **7. Other chemicals**

There are other toxics and chemicals that are known to be harmful to humans such as: Arsenic, Asbestos, Bisphenol A (BPA), Fluoride, Lead, Mercury, Nitrate, Perchlorate, Phthalates, Boric Acid, BHA, DMDM Hydantoin, Bronopol, Oxybenzone, Boric Acid and Sodium Borate, PCBs, Flame retardants (PBDEs), PFCs/Teflon.

Ref: <http://www.ewg.org/chemindex>

Additional resources and references:

<http://www.thedailygreen.com/>

<http://www.organicconsumers.org/>


<http://organic.org/>

<http://www.ewg.org/>

# City of Los Altos


## Climate Action Plan Environmental Commission Meeting

February 11, 2013




# Tonight's Agenda

- Project update
- Review GHG reduction target(s)
- Present GHG reduction structure
- Discuss preliminary reduction measures




# Project Update

- Work completed to date
  - GHG inventory update and forecast
  - Survey on energy and transportation
  - GHG reduction quantification for existing accomplishments
  - Draft CAP reduction measures and initial GHG quantification

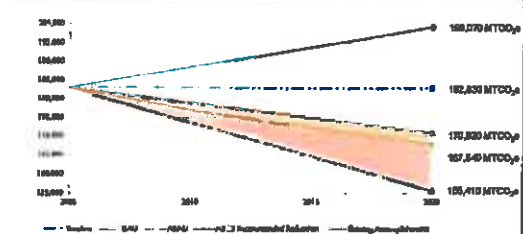


# CAP Target


35 Percent Below Baseline Target	2015	2020
Business as Usual (BAU)	182,830	199,070
Adjusted BAU (State + Local Reductions)	182,830	167,640
Percent Below Baseline Emissions Reduction (MTCO <sub>2</sub> e)		15%
Emissions Goal (MTCO <sub>2</sub> e)		155,410



# CAP Target




Gap between Adjusted BAU + Local Reductions and the AB 32 recommended reduction is 12,230 MTCO<sub>2</sub>e (Adjusted BAU forecast plus existing accomplishments is 8% below baseline emissions)

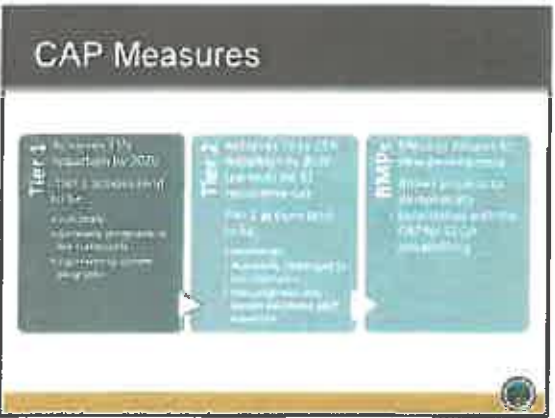
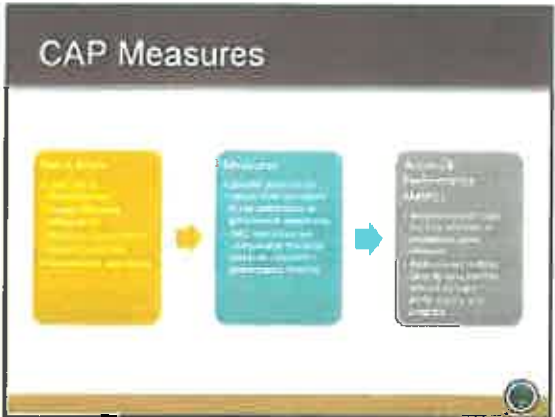


# Identifying CAP Measures

Measure writing is an iterative process that involves:

- Environmental Commission input
- Staff input
- Elected official input
- City context (physical, social, political considerations)
- Best practices from other communities





### Example Quantification

Quantification	Value	Calculation
A. Baseline Census-Occupied Households	8,889	US Census
B. Average kWh per single-family home-visit	8,828	PG&E Research Report
C. Advanced retrofit participation (single-family households)	376	Participation Goal
D. Number of participating census-occupied households	499	Calculation = A * C
E. kWh reduction rate for advanced retrofits	459	Energy Upgrade CA
F. kWh savings per household	8,880	Calculation = D * E
G. Overall kWh savings	1,747,800	Calculation = F * F
H. Metric tons of CO <sub>2</sub> (MTCO <sub>2</sub> e) per kWh	0.00073	Low Action Emissions Inventory
I. Subsource reduction (MTCO <sub>2</sub> e)	1,280	Calculation = G * H

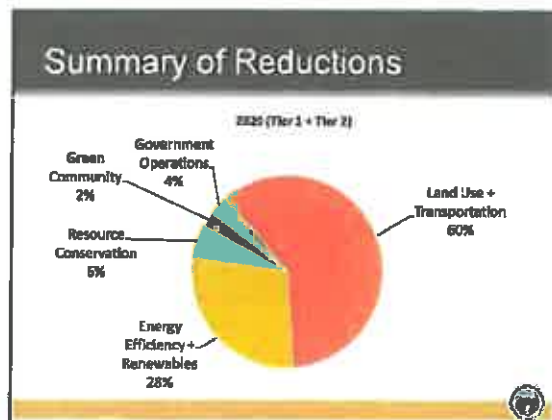
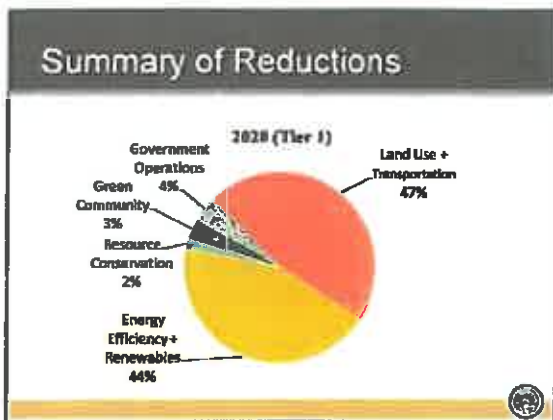
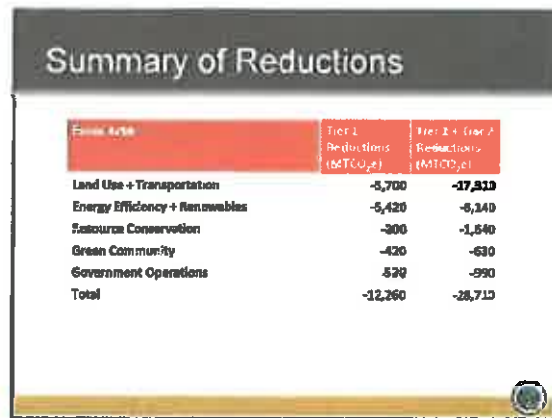
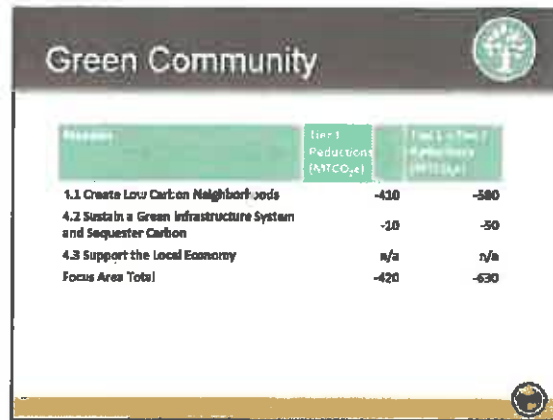
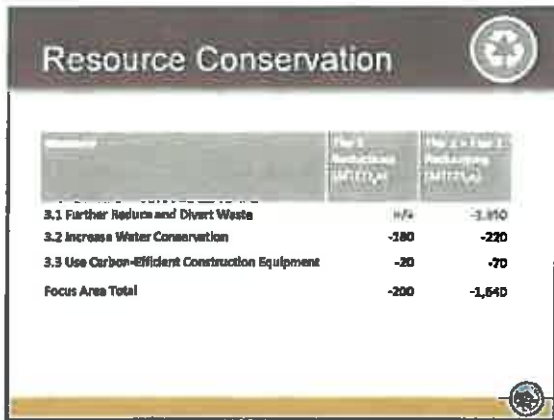
Note: The activities in this table comprise the entire identified, which in turn is one component of the measure. The full measure includes a collection of the source of the savings to occur through multiple and a different number of the measure already included in other tiered measures.

### Land Use + Transportation

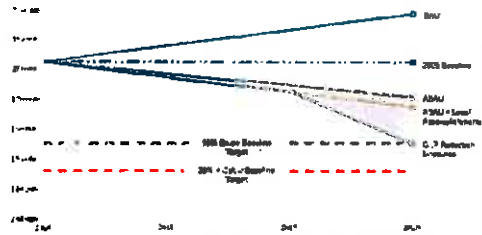
Measure	Tier 1 Reductions (MTCO <sub>2</sub> e)	Tier 2 + Tier 3 Reductions (MTCO <sub>2</sub> e)
1.1 Improve Non-Motorized Transportation	-3,520	-12,590
1.2 Expand Transit and Commute Options	-1,040	-1,570
1.3 Amend the General Plan	0/4	-1,300
1.4 Update RideShare Facilities	40	40
1.5 Provide Alternative Fuel Vehicle Infrastructure	-1,300	-1,680
<b>Focus Area Total</b>	<b>-5,700</b>	<b>-17,310</b>

### Energy Efficiency + Renewables

Measure	Tier 1 Reductions (MTCO <sub>2</sub> e)	Tier 2 + Tier 3 Reductions (MTCO <sub>2</sub> e)
2.1 Promote Energy Conservation	-630	-690
2.2 Increase Energy Efficiency	-3,950	-6,270
2.3 Incentivize Renewable Energy	-1,240	-1,240
<b>Focus Area Total</b>	<b>-5,420</b>	<b>-8,140</b>



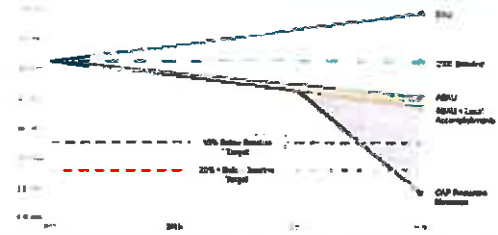
## Tier 1 Reductions



Tier 1 measures are estimated to reduce emissions by 12,280 MTCO<sub>2e</sub>. To achieve a 15% reduction target



## Tier 1 + Tier 2 Reductions



Tier 1 + Tier 2 measures are estimated to reduce emissions by 28,710 MTCO<sub>2e</sub>, which achieves the 20%+ reduction target (24% below baseline emissions)



## Measure, Action, and BMP's

- Open Discussion



Land Use +  
Transportation

Energy  
Efficiency +  
Conservation

Resource  
Conservation

GHG  
Community

Government  
Operations



## For More Information

Please Contact:

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City of Los Altos

[ZDahl@losaltosca.gov](mailto:ZDahl@losaltosca.gov)

(650) 947-2633





DATE: February 12, 2013

AGENDA ITEM #16

**TO:** City Council  
**FROM:** Kathy Kleinbaum, Economic Development Manager  
**SUBJECT:** Electric vehicle charging stations

**RECOMMENDATION:**

Adopt Resolution 2013-02, amending the Fiscal Year 2012/13 Fee Schedule to create an electric vehicle charging fee

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**SUMMARY:**

**Estimated Fiscal Impact:**

**Amount:** Anticipated fee revenue of \$5,930 per year

**Budgeted:** No

**Public Hearing Notice:** Not applicable

**Previous Council Consideration:** None

**CEQA Status:** Not applicable

**Attachments:**

1. Resolution 2013-02
2. Map of electric vehicle charger locations



## BACKGROUND

At its April 10, 2012 regular meeting, the City Council directed staff to include an analysis of electric vehicle (EV) charging stations in the Downtown Parking Management Plan (Plan). Having publicly-available EV chargers within Los Altos is a stated interest of the Environmental Commission as well as community organizations. While researching this topic for the Plan, a program was identified that could provide free electric vehicle charging stations to the City. The timing of the program required staff to pursue the opportunity prior to the completion of the Plan, although initial findings of the Plan are being used to develop the proposed program as described in this report.

ChargePoint, Inc., headquartered in Campbell, California, is the current world-wide market leader for EV charging stations and networks. ChargePoint received a grant from the United States Department of Energy, as part of the American Reinvestment and Recovery Act, to create the ChargePoint America program which offers free electric vehicle charging stations to municipalities. The program is nearing its conclusion; however, the City of Los Altos was able to obtain three dual-headed chargers which allows for six charging stations.

Under the terms of this program, the City will be provided three dual-headed charging stations. The retail value of these EV stations is \$6,800 per station for a total of \$20,400. The City is required to use ChargePoint's authorized vendor to install the EV stations. The first year of service fees are covered by the federal grant, after that the City must pay the annual fee of \$230 per charging station to ChargePoint for operating the stations through its wireless network technology. The City is under no obligation to continue the program if it is not successful. The deadline to install the chargers is March 31, 2013. The City is working with PG&E to complete the preliminary engineering and it appears that this deadline is feasible to achieve.

Many nearby cities have taken advantage of this grant program, including Los Altos Hills, Palo Alto, Portola Valley, Redwood City, Los Gatos, Campbell, and Saratoga. All of the cities, with the exception of Los Altos Hills, provide the EV stations in their downtowns as an incentive to attract shoppers from out of town.

Locations selected for the EV chargers are based on careful consideration of several factors, including: proximity to available electrical lines; minimization of installation costs; existing parking demands; and convenience for potential users. Each installation of a dual-headed station will require dedication of two parking spaces for EV-only use. The preliminary occupancy data from the Downtown Parking Management Plan, as well as input from the consultants preparing the Plan, was instrumental in determining the locations. One dual-headed charger will be located adjacent to the playing fields/Bus Barn Theater parking area in the Civic Center complex and two dual-headed chargers will be located in Parking Plaza 3, the parking plaza that runs along San Antonio Road. Parking Plaza 3 was selected because it has the largest pool of spaces and most excess capacity based on the occupancy counts completed in September and December 2012. Plaza 3 was never observed reaching capacity (defined as 85% or higher occupancy), even during the busy holiday season. Additionally, Plaza 3 is very easy to navigate to for people coming from out of town seeking the EV chargers as a destination. A map showing the location of the EV stations is included in this report as Attachment 1.

## **DISCUSSION**

The proposed fee for using the EV chargers is \$1.00 per hour. This fee is intended to cover electricity costs, the annual service fee, and to offset maintenance costs that may arise. A number of cities do not charge fees for use of their EV chargers, including Palo Alto, Mountain View, and Redwood City. Of the cities that do charge, the charges range between \$0.50 and \$2.50 per hour with \$1.00 per hour being the most common fee. The City cannot charge by kilowatt used since the Public Utilities Commission (PUC) forbids public entities from charging for electricity by kilowatt unless they serve as a utility company.

ChargePoint will manage the EV stations through its wireless system. Users can reserve the chargers or view their availability remotely through the ChargePoint website or mobile application. ChargePoint will collect usage fees and remit payments back to the City on a monthly basis, minus a 5% service fee for each transaction. Users can pay with their ChargePoint payment card or by calling a number and using their credit card. The majority of public EV chargers in the Bay Area are operated through the ChargePoint system so most EV drivers are familiar with the system.

The EV chargers located in Plaza 3 would be restricted to a three-hour time limit, the same as the general public parking in that plaza. EV chargers at the Civic Center would have a four-hour time limit. The time limits are important to ensure that the chargers are not monopolized by one car all day, but are set to be long enough to let the vehicles get close to a full charge.

To reduce installation costs, the two chargers in Plaza 3 will be located adjacent to each other so that they can access the same electrical meter. The total installation cost is estimated to be \$30,000, which include design costs, PG&E fees and construction activities, and will be funded through previously appropriated monies in the Annual Special Projects and Studies CIP Projects No. 10-07 and No. 11-09

## **FISCAL IMPACT**

The service fees for the first year of service are covered by the program. Starting in year two, the service fees will be \$230 per charging station or \$1,380 per year. Annual maintenance costs for the City are estimated to be \$1,500 per year for the repair of bollards or equipment that may be vandalized or damaged by vehicles, and electrical costs of approximately \$3,000. These expenses will be included as part of the upcoming FY 2013/14-2014/15 biennial Financial Plan.

If each charger is used on average for 20 hours per week, the revenue realized through the \$1.00 per hour charge will be approximately \$5,930 per year which should be sufficient to offset the operational costs of the EV program. If the EV chargers are used more frequently, the City would be able recoup a portion of the capital outlay for the installation.

## **PUBLIC CONTACT**

The potential development of an EV charger program was on the October 8 and December 10, 2012, and January 14, 2013 Environmental Commission agendas.

This report has been distributed to the Environmental Commission.

Posting of the meeting agenda serves as notice to the general public.

**RESOLUTION NO. 2013-02**

**A RESOLUTION OF THE CITY COUNCIL  
OF THE CITY OF LOS ALTOS  
ESTABLISHING AN HOURLY FEE RATE FOR CITY-OWNED  
ELECTRIC VEHICLE CHARGING STATIONS**

**WHEREAS**, the Municipal Code specifies that certain fees and charges shall be set by Resolution of the City Council; and

**WHEREAS**, these fees and charges should be in amounts sufficient to recover the costs incurred by the City with respect to the functions to be performed by the City; and

**NOW, THEREFORE, BE IT RESOLVED** that the adopted FY2012/2013 Fee Schedule is hereby amended to include a \$1.00 per hour electric vehicle charging fee in order to implement the City's new charging station program; and

**BE IT FURTHER RESOLVED** that all other the fees and charges set forth in the FY 2012/13 Fee Schedule shall remain in effect until a new Resolution amending the same is adopted by the City Council.

**I HEREBY CERTIFY** that the foregoing is a true and correct copy of a Resolution passed and adopted by the City Council of the City of Los Altos at a regular meeting thereof held on the 12<sup>th</sup> day of February, 2013 by the following roll call vote:

**AYES:**

**NOES:**

**ABSENT:**

**ABSTAIN:**

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Jarrett Fishpaw, MAYOR

Attest:

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Jon Maginot, CITY CLERK

Resolution No. 2013-02

**ATTACHMENT 1**

**Attachment 1**  
**Location of Electric Vehicle Chargers**

