

**REPORT TO MAYOR AND COUNCIL****TO THE HONORABLE MAYOR AND COUNCIL:**

DATE: November 18, 2014

SUBJECT: CITYWIDE CLIMATE ACTION PLAN - ANNUAL IMPLEMENTATION REVIEW**Report in Brief**

The Citywide Climate Action Plan (CAP) adopted by the City Council on July 23, 2013 requires an annual report to Council on progress toward implementation. As shown in this first progress report, implementation of the CAP has been primarily a continuation or an expansion of existing activities begun prior to adoption of the CAP. The City's work on energy saving projects, water conservation, alternative fuel vehicles and other transportation alternatives implement the CAP and help meet its goal of reduced greenhouse gas emissions. In addition to municipal facilities, operations, and maintenance activities, City policies also reduce energy consumption by promoting the public's use of transportation alternatives, and encouraging/requiring the design and construction of energy efficient buildings by private developers and builders. Finally, City programs can provide education and incentives to facilitate increased recycling, energy efficient residential and business retrofits, and other community action. This report highlights several examples of ongoing or recently completed activities and explains the connection to implementation of the CAP.

Background

The CAP incorporates the four broad categories of transportation, energy savings, waste reduction, and water conservation found in the City of Concord's 2007 Green Ribbon Task Force Report. Besides creating new action items (referenced as Strategies), the CAP established progress indicators and set targets through 2035 that ensure the environmental principles of the Green Ribbon Task Force continued on as new accomplishments. The Citywide Climate Action Plan can be accessed at <http://www.cityofconcord.org/pdf/dept/planning/climate.pdf>.

The Citywide CAP was also prepared to address State requirements. The City of Concord will meet State mandates through implementation of this planning document, as well as the Concord Reuse Project's Climate Action Plan. This report focuses solely on the Citywide CAP, because implementation of the Concord Reuse Project's Climate Action Plan will not start until redevelopment of the former Concord Naval Weapons Station begins.

A city-wide internal CAP Action Team led by the City Manager's Office was created to ensure and monitor implementation and foster inter-departmental coordination and communication on the strategies. The CAP Action Team consists of representatives from all departments.

Discussion

The CAP recommends over 40 strategy items to be implemented, primarily by City staff. These strategy items are included in the following categories; energy savings (primarily in building/facility construction and operation), waste reduction, water conservation, and transportation/land use. All share the common goal of saving energy and may result in cost savings. Reduction of solid waste, along with recycling and reuse, contributes to energy conservation through reduced transportation needs of garbage hauling, and reduced production of methane (a greenhouse gas) in landfills. Water conservation reduces the need for energy required to pump and distribute clean water, as well as to remove waste water from private and public facilities. Increased use of alternative fuel vehicles and adoption of land use practices that encourage walking, bicycling and other transportation alternatives to automobiles will also reduce greenhouse gas emissions and result in savings. The discussion below provides a few examples of current and ongoing CAP implementation strategies, which are arranged according to the function performed. Attachment 1 summarizes the implementation status of all CAP strategy items.

Municipal Operations and Public Infrastructure

Municipal Buildings/Other Facilities

To the extent feasible, Engineering, Public Works and Parks/Recreation staff have focused capital improvement projects and maintenance on activities that increase municipal buildings/facilities energy efficiency, water conservation and the reduction of solid waste. An example of a recently built capital improvement project that conserves water is the Meadow Homes Spray Park. This park uses domestic water, which is treated, sanitized and recirculated. The vast majority of water in the 4,000 gallon reservoir at the Meadow Homes Spray Park is recirculated rather than draining away to the storm drain or into a drain connected to the sewer system. The system has just completed three years of operation. Another example of a capital improvement project that resulted in increased energy efficiency was the establishment of the solar panel system at Concord Community Park that generates the energy needed to operate the Park's pool circulation pump.

Street/Other Public Lighting

As highlighted in numerous prior staff reports, retrofitting the City's 8,419 street lights and exterior lights at building facilities with new technology as part of the ESCO projects has increased energy efficiency and significantly reduced energy costs.

Municipal Vehicle Fleet

Replacement of current municipal vehicles with alternative powered and more fuel-efficient models, as well as a reduction in the overall number of vehicles results in greater energy efficiency and fewer overall vehicle emissions. As of Fall 2014, the City had received five all-electric vehicles, with delivery of 5 more expected

in 2015 as a result of a grant. In addition, over the past two years the City has reduced its vehicle fleet by 10%, from 288 vehicles to 260 today.

Landscaping, Infrastructure and Other Outdoor Maintenance

Public Works has installed zones of “native” landscaping at the City’s golf course, consisting of non-irrigated native grasses and plants. This has removed approximately 15 acres of turf which no longer uses well water. More widespread water conservation measures include replacement of irrigation controllers with “smart” controllers that automatically adjust to real-time weather data, as well as the reconstruction of medians and other landscape areas with low water-need designs. The reduction in both well water and water from Contra Costa Water District means that less energy is being used to pump and distribute the water.

Transportation and Land Use

The CAP strategies support new technologies/road designs and adopt or employ other proactive steps to increase energy efficient transportation alternatives and reduce inefficient transportation vehicles and practices. One example currently underway is preparation of a Citywide Bicycle and Pedestrian Master Plan. This comprehensive Plan will be used as a blueprint to develop a network, policies and programs that promote safe alternative modes of transportation, thereby encouraging residents to walk and bike instead of using their cars.

In Spring 2015, the new Grant, Salvio, and Oak Streets Corridor Plan should be initiated. The grant-funded Corridor Plan will focus on the City’s Downtown BART Station Priority Development Area (PDA) and will seek to enhance these three critical corridors in order to better connect residents living in the PDA to transit, retail, and jobs. The ultimate goal of this design-level plan will be to encourage walkability and other CAP recommended activities. It will also set the stage to secure future grant funding for construction of the improvements.

Private Building Development and Construction

The City has taken many actions to promote private development incorporation of new energy-saving designs and technology, as well as best construction practices that will result in energy efficient development and construction. As a result of CALGreen code requirements mandated by the State, and the City of Concord initiatives, many new incentives and development requirements have been put in place including:

- Establishment of an online fast track permitting process for residential rooftop solar photovoltaic systems. Expansion of this solar energy fast track process for non-residential buildings is under development.
- Creation of new forms, application checklists and guidance on the Building Divisions’ web page designed to increase understanding of new energy related building codes and permits.
- Proposed changes to the current fee structure to encourage solar installation by replacing fixed fees for all solar power installation projects with one that will provide lower fees for smaller installations and fees that are proportional to the size of the system being installed.

**CITYWIDE CLIMATE ACTION PLAN,
IMPLEMENTATION REVIEW**

November 18, 2014

Page 4

These recent and proposed actions encourage solar energy and other renewable energy sources and increase buildings' energy efficiencies regardless of the energy source.

Public Outreach: Education, Incentives and Joint Participation

City staff continues to perform education outreach, to create economic/other incentives, and to participate in joint ventures in its efforts to support residents and businesses to make energy efficient choices. For example, the City provides public education on recycling opportunities and water conservation through the City website. Recently, the City Council authorized two new Property Assessed Clean Energy (PACE) programs - the California HERO Program and Figtree Financing - to operate within the City that can assist greater business and homeowner investment in energy saving upgrades.

Conclusion

As shown in Attachment 1, the CAP strategies will be implemented through 2035. This means that some strategy items that are considered infeasible today are expected to be phased in over time as technology and community norms change. Some strategies are expected to be implemented in the short term and/or are underway already. Others are considered long range, and will be reviewed for implementation at a later date.

Fiscal Impact

As noted in the agenda report, decreased energy consumption not only reduces greenhouse gas emissions, but also results in significant cost savings to the City. Overall, the implementation of CAP strategies is both cost effective and environmentally beneficial.

Public Contact

The City Council Agenda was posted.

Recommendation for Action

Staff recommends that the City Council receive the report and review the information provided.

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Enclosures: Attachment 1 - Summary of CAP Team Activities

Summary of CAP Team Activities

Activity Description	CAP Strategy #	Timing*	Implementation Status**	Notes
Green Building Ordinance	BE 1	Short-Term	Initiated	
Prepare for California Zero Net Energy Standards	BE 2	Mid-Term	None	
Energy Audits for Existing Buildings	BE 3	Short-Term	In Process	
Demand response programs	BE 4	Ongoing	Begun	
Efficient Appliances	BE 5	Short-Term	See notes	Combine with BE3 and BH1
Renewable Energy Facilitation	BE 6	Short-Term	Initiated	
Residential Energy Conservation	BE 7	Mid-Term	Initiated	
Energy Information	BE 8	Short-Term	None	
Public Lighting Retrofit	BE 9	Ongoing	In-process	
Construction Energy Use	BE 10	Long-Range	None	
Water Efficient Indoor Fixtures and Appliances – outreach to public	BH 1	Ongoing	Begun	
Water Efficient Indoor Fixtures and Appliances – Municipal buildings	BH 1	Ongoing	In process	
Water-Efficient Outdoor Irrigation	BH 2	Ongoing	Initiated	
Water-Metering and Monitoring – Private development	BH 3	Mid-Term	None	
Water-Metering and Monitoring – Municipal buildings	BH 3	Ongoing	Complete	
Recycled Water – Private development	BH 4	Short-Term	See Notes	Midterm use in Base Reuse Area
Recycled Water – Municipal buildings	BH 4	Short-Term	Initiated	
Expanded Waste Reduction Program	BW 1	TBD	See Notes	Implementation dependent on Concord Disposal
Pedestrian Master Plan	TL 1	Short-Term	Initiated	See TL 4 City doing combined Pedestrian/Bicycle Plan

Activity Description	CAP Strategy #	Timing*	Implementation Status**	Notes
Programs and enforcement for safer active transportation	TL 2	Short-Term	Initiated	
Traffic calming measures	TL 3	Ongoing	Ongoing	
Bike Master Plan	TL 4	Short-Term	Initiated	See TL 1 City doing combined Pedestrian/Bicycle Plan
Bike parking installations – private development	TL 5	Ongoing	In Process	
Bike Parking installations – Municipal facilities	TL 5	Short-Term	In Process	
Safe Routes to Schools comprehensive program	TL 6	Ongoing	Initiated	Implementation dependent on School District.
Bus signal priority	TL 7	Long-Term	See Notes	Dependent on additional funding.
Multi-modal way finding	TL 8	Mid-Term	Initiated	
City Forest Plan	TL 9	Long-Term	None	
Prioritizing active modes in engineering and design	TL 10	Short-Term	Initiated	
Make bike and pedestrian projects an active priority in 10-year CIP and project funding	TL 11	TBD	TBD	City Council determines CIP priorities – See TL 1 and TL 4
TDM and transportation management associations	TL 12	Mid-Term	Initiated	TDM options for City employees' commute are in process.
Parking cash-out credits	TL 13	Mid-Term	None	
Downtown parking meters feasibility study	TL 14	Mid-Term	Study at Mid-Term	Study done in 2012 – not feasible at this time.

Activity Description	CAP Strategy #	Timing*	Implementation Status**	Notes
Fleet efficiency	TL 15	Ongoing	In Process	Current technology limited for increasing efficiency of large Public Works vehicles.
Limit Idling of City Fleet vehicles	TL 16	Ongoing	Complete	
Affordable housing parking credits	TL 17	Ongoing	Variable	Dependent on developer participation
Affordable housing density bonuses	TL 18	Ongoing	Variable	Dependent on developer participation
Parking lot shading – Private development	TL 19	Mid-Term	None	City Council decision needed on change to Development Code.
Parking lot shading – Municipal property	TL 19	Long-Term	Variable	Implement as economic and design considerations allow.
Cool pavements – New private development	TL 20	Mid-Term	Study at Mid-term	City Council decision needed on new policy and any change to Development Code.
Cool pavements – Mntnce existing City infrastructure	TL 20	Mid-Term	Variable	Current technology not feasible use for all infrastructure types.
Dense and accessible station areas	TL 21	Ongoing	Initiated	
Unbundled parking credits	TL 22	Long-Term	Study at Mid-term	City Council decision needed for new policy.
Preferred motor vehicle parking	TL 23	Mid-Term	None	
Active commuter showers	TL 24	Mid-Term	None	
Electric vehicle charging technology – for Municipal Fleet	TL 25	Ongoing	In-Process	

Activity Description	CAP Strategy #	Timing*	Implementation Status**	Notes
Electric vehicle charging technology – for private vehicles on private property	TL 25	Mid-Term	None	
Accessible locations for City jobs and services (provided by City)	TL 26	Long-Term	None	No plans for constructing new or moving existing Municipal offices.
Applauding Private Climate Action	P1	Ongoing	Initiated	
Climate Friendly Reminders	P2	Short-Term	None	
Inviting Local Climate Leaders' Input	P3	Mid-Term	None	

Notes:

BE= Building Energy BH=Building Water BW= Building Waste TL = Transportation and Land Use P=Participation

*Timing reported is for completion of entire strategy item. Completion date equals:

- Ongoing
- Short-Term (July 2016)
- Mid-Term (2020)
- Long-Term (post 2020)

**Implementation status equals:

- Currently infeasible
- TBD – To Be Determined
- None
- Initiated
- In Process (>50%)
- Complete