



CITY OF SAN JOSE
Green Vision
2009
Annual Report

Including Tips For
A Greener Community



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Executive Summary

San José's Green Vision continues to position the City as the center of innovation and entrepreneurship, a leader in environmental sustainability practices while fostering a high quality of life for residents and businesses. The Green Vision lays out ten aggressive environmental goals that the City is partnering with residents and businesses to achieve by 2022.



The overall financial outlook for the City and State remains uncertain. Unemployment remains persistently high at over 10%, credit continues to be difficult to obtain, and home foreclosures remain at an all time high. However, one bright spot is the injection of Federal and State grant money, including federal stimulus dollars, and tax credit allocations that are targeted at fostering and building the green economy. The Green Vision positions the City well to receive grant funds, and in fact, to date, San José has received over \$50 million in grant funding related to Green Vision projects in 2009, and local companies received over \$80 million in federal tax credits that will spur expansions and hiring in sectors such as renewable energy.

Key Achievements

The attached report provides information on the accomplishments and progress for each of the Green Vision goals. Examples of some key accomplishments on the Green Vision include:

- Over \$4.1 billion in total venture capital invested in Clean Tech companies in Silicon Valley, with \$1.3 billion invested in 2009 alone;
- Energy efficiency measures implemented and solar panels installed at City facilities, with estimated energy savings to date of \$986,000;
- 15 MW of solar installed in San José;
- Private sector green building ordinance adopted August 2009; over 2.1 million square feet of certified green buildings completed;
- Highest multi-family diversion rate in the country at over 80%;
- \$6.4 million dollar Federal grant to extend the recycled water system;
- Wikiplanning site to engage the community on the development of the General Plan which recorded over 4,500 logins;
- City fleet exhaust emissions reduced by 5.5% and the City's alternative fueled fleet highlighted in over 10 languages on the BBC website;
- Street tree inventory, which will form the foundation of a 100,000 trees strategy, is now underway with AmeriCorps volunteers
- California Public Utilities Commission adopted tariffs for LED lights, creating an opportunity to take advantage of energy efficiency cost savings;
- Trails increased by 3.1 miles in 2009 and the Trail Count survey indicated a 9.6% increase in usage over 2008 along surveyed trails.

Awards & Accolades

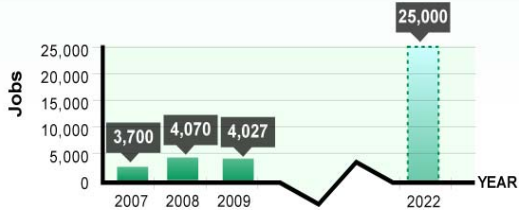
In 2009, environmental sustainability and climate change were at the forefront of local and global initiatives. The City's Green Vision garnered numerous awards and accolades including:

- The International Economic Development Council's 2009 IEDC Excellence in Economic Development Awards selected the City of San José's Green Vision Program as a winner in the Sustainable and Green Development Category, population group over 200,000;
- San José was rated by BusinessWeek as the number one U.S. city to start and grow a clean tech company;
- The Roosevelt Community Center, which achieved LEED Gold status in 2009, has won a series of awards for its innovative approach combining building architecture, environmental sustainability, and public art, including the 2009 American Public Works Association Project of the Year and the San José Business Journal "Structures" Award for public green project of the year;
- The Building Operations and Management Association (BOMA) awarded the City an Emerald Award for Innovation in honor of City Hall achieving LEED-EB Platinum;
- The City's Special Event Zero Waste Program received the 2009 Governor's Environmental and Economic Leadership Award for its outstanding efforts in waste reduction;
- The Solid Waste Association of North America awarded San José's new Apartment Recycling Program with its 2009 Recycling System Gold Excellence Award for its unprecedented achievement of 80% waste reduction for multi-family dwellings; and;
- The City's green fleet was profiled on the BBC World Service Website in over 10 different languages
http://www.bbc.co.uk/worldservice/specialreports/2009/11/091124_climatechange_initiatives.shtml ;
- The Federal Department of the Interior designated 16.4 miles of San José's trail network (Guadalupe River Trail, Highway 237 Bikeway and Coyote Creek Trail) as part of the National Recreation Trail (NRT). San José was the only California City to secure the designation this year.
- 2009 California Parks and Recreation Society Award of Excellence for the Airport Parkway Undercrossing;
- The Silicon Valley Bicycle Coalition awarded the City the 2009 Platinum Bike Friendly Workplace designation.

Key Performance Metrics

Clean Tech Jobs

Target: 25,000 Jobs

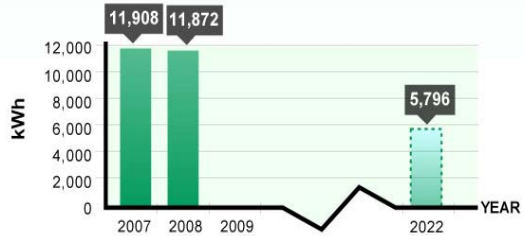


Revised baseline number reflects clean tech jobs in San Jose based on Core Green Economy's metric which is a widely accepted industry metric at the national and regional level

Per Capita Energy Use

(Electricity And Natural Gas)

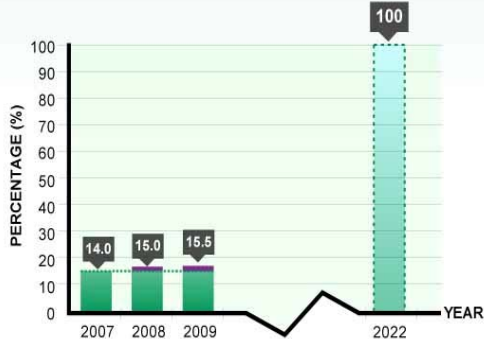
Target: 50% Reduction



Revised baseline number reflects updated and more comprehensive data from PG&E. 2009 data is pending.

Renewable Energy Generation

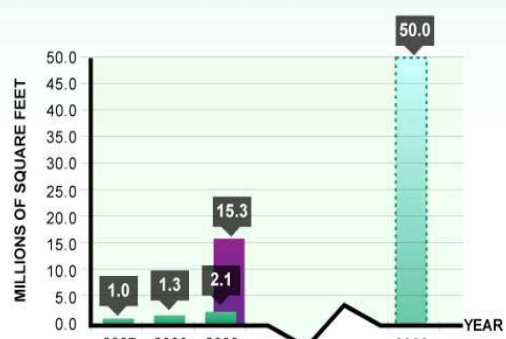
Target: 100 Percent



PERCENTAGE OF RENEWABLES IN PG&E PORTFOLIO
PERCENTAGE OF SOLAR IN SAN JOSE

Certified Green Building Space

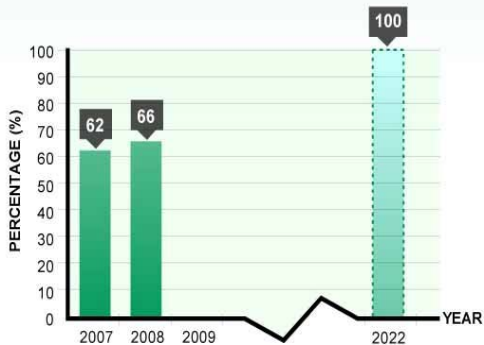
Target: 50 Million Square Feet



CERTIFIED
REGISTERED

Trash Diverted from Landfills

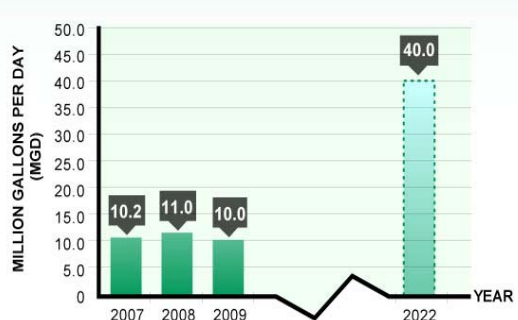
Target: 100%



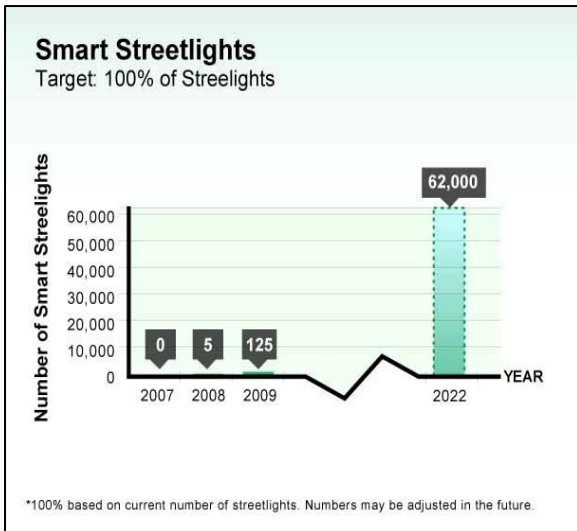
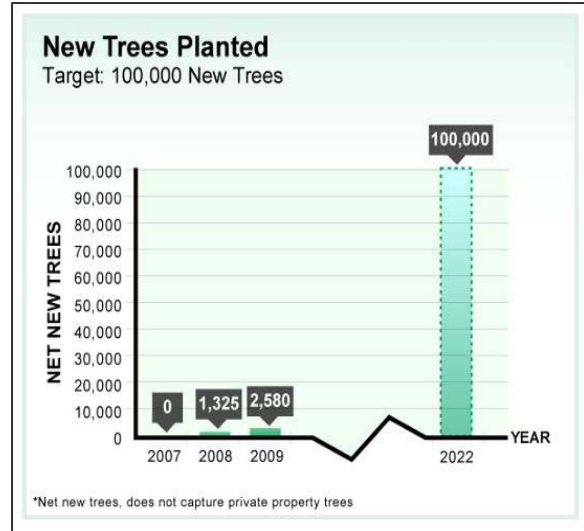
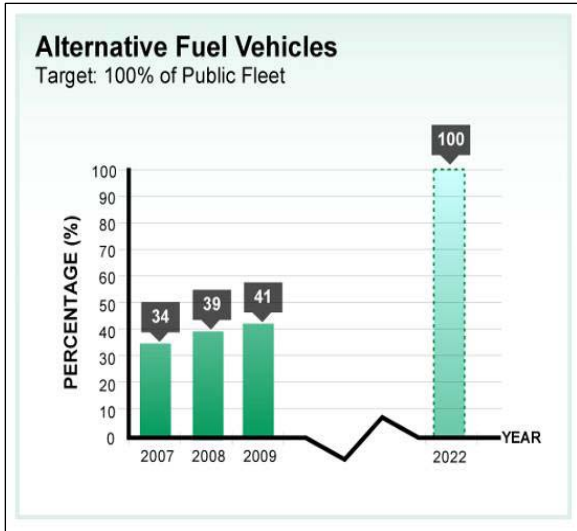
2009 data is pending. Data from state is available in mid-2010.

Average Daily Use (Recycled)

Target: 40 Million Gallons per Day



2009 use impacted by unseasonably cool weather in the summer months



Climate Change and Greenhouse Gas Emissions

The San José Green Vision serves as the City’s roadmap to address climate change. Implementation of Green Vision’s goals related to clean technology, energy, green buildings, water, waste, sustainable growth, trees, and trails will result in significantly reduced greenhouse gas emissions. In 2007, the City’s emission numbers, excluding emissions from transportation, were 4.32 million metric tons (MMT). By 2022, achievement of Green Vision goals will reduce emissions to approximately 2.46 MMT, which will enable the City to stay on track to meet and exceed the Council adopted GHG emission reduction targets. These targets are based on 2005 baseline numbers and at this time, the Green Vision is projected to exceed targets in 2022 by 13%. A Climate Action Plan, which is being developed in tandem with the General Plan Update process, will further refine the road map and provide a comprehensive strategy, including transportation emissions, to reduce greenhouse gas emissions.

2010 Work Plan

This report outlines a detailed 2010 Work Plan for all goals (see Appendix). As directed by Council in March 2009, the Work Plan has been developed with three screening criteria:

- a. Does the initiative result in cost savings or additional revenue generation, especially in the General Fund?
- b. Will the initiative generate investment from the private sector or from the Federal or State government?
- c. Will the initiative make measurable progress on one or more of the 10 Green Vision goals?

A discussion of some of the key areas that support this work plan and are essential to the overall success of the Green Vision is outlined below.

Clean Tech

As San José emerges as a world center of Clean Tech innovation, entrepreneurs, companies, and universities continue to develop technologies that will change the world and create economic opportunities for generations to come. Fostering new technologies is critical to the local economy and job creation. To provide leadership for the long-term economic success of this emerging industry sector, the City developed its Clean Tech Strategy, which will be an integral component to achieving our Green Vision. The Strategy outlines various goals to ensure that this next wave of innovation occurs in San José. The City must encourage both established Clean Tech companies and start-up firms to stay and grow in San José by providing incentives and services at every stage of a company's growth. Incubating next generation technologies through partnerships with local universities and the Environmental Business Cluster are two ways the City is encouraging companies to locate and grow in the City.

Energy

The need for high quality reliable sources of energy is undisputed. It is imperative that the City reduce energy consumption in order to reduce costs and reduce reliance on non-renewable energy sources. The City is focusing on all aspects of energy ranging from conservation and reaching the 50% per capita energy reduction goal, to pursuing receiving 100% of our electricity from renewable energy sources, and exploring new technologies to generate energy from waste. Small-scale street light retrofit pilots with LED lights were implemented in 2009, and 2010 will see 1,500 more lights installed with Recovery Act funds. City facility energy-efficiency retrofits and solar installations completed in 2009 anticipate annual savings of approximately \$80,000. Total estimated energy savings to date are anticipated to be about \$986,000. The City negotiated its first solar power purchase agreement and a 1.3 MW system will be completed at the Central Service Yard in 2010. An additional 2 MW is anticipated to be installed at the Airport in 2010. Energy savings from City facility retrofits and renewable energy projects will go back into the City's new Energy Fund to fund more energy efficiency and renewable energy projects.

A significant step in converting organic waste to energy occurred in June 2009, when Council authorized staff to enter into negotiations to lease 40-acres of San José/Santa Clara Water Pollution Control Plant Lands to the Zero Waste Energy Development Company to site a privately run dry anaerobic digestion facility. The facility could eventually process up to 150,000 tons of organic waste per year. This would be the first such facility in the United States.

Grants

Green Vision projects with grant funding, from the Federal Recovery Act and other State sources, were the focus for 2009 and will remain a high priority for 2010. Project planning for job training, and City energy efficiency, solar, street lighting, and recycled water projects, is well underway and implementation of the projects is anticipated to start in early 2010. Ensuring compliance with Recovery Act stipulations, including reporting and communications with residents and businesses, continues to be a priority focus area. For more information see: <http://www.sanjoseca.gov/recoveryact/index.asp>

Additionally, grants for trees and trails from other local, state and federal grant funding sources such as the Santa Clara County Open Space District, Prop 84, and Caltrans, continue to be actively pursued.

Key Focus Areas

In these challenging economic and environmental times, it is critical for the City to adapt to emerging opportunities, leverage critical available resources, and most importantly, maintain a long-term vision. By doing so, the City's long-term economic goals, including growing a thriving clean tech sector and increasing the City's employment base, will not be compromised, but further enhanced and poised for growth when the current recessionary period ends.

Leading by Example

The City is currently facing a projected budget shortfall of \$100 million in FY 2010-2011. Balancing the budget will necessitate extremely difficult decisions, with essential community services likely impacted. While maintaining focus on "green" programs and policies will be a challenge, this could also afford us the opportunity to innovate and forge ahead with investments and policies that result in fiscally and environmentally sustainable initiatives. This may necessitate some upfront investment on efforts that have far reaching long term benefits such as renewable energy and recycled water infrastructure, however, this can be done in various ways, such as partnerships and other financing mechanisms.

Advocacy

Legislative advocacy, policy development and strategic efforts to secure funding at the federal and state level remain critical components to support Green Vision implementation and clean tech job growth in the region. Key areas of advocacy include:

- Innovation framework: incubators, innovation clusters, support for commercialization efforts, and workforce training program funding.
- Renewable Energy and Energy Efficiency: Property Assessed Clean Energy (PACE) programs, feed-in-tariff and net-metering legislation, implementation of AB 2466, smart grid standards adoption and demonstration.
- Zero Waste: Incent conversion of organic waste to energy through renewable portfolio standards (RPS) and diversion credits, Plastic bag legislation.
- Clean Transportation: electric vehicle charging stations, demonstration and acquisition of green fleet vehicles.
- Funding: Access to capital for Silicon Valley clean technology companies (loan guarantees, tax credit allocations, clean tech manufacturing equipment incentives),

federal and state grant activity to support green vision implementation, and public private partnerships.

San José will need to remain active on the legislative advocacy front in both Sacramento and Washington D.C., and to continue to compete for resources to ensure progress on Green Vision goals.

Financing Mechanisms

As the City's available funding for various initiatives continues to diminish, exploring new financing mechanisms such as grants, modified fee structures, and improvement districts, becomes imperative. For grant applications to truly be a high priority, planning for adequate staffing resources and local funding matches will be critical. Council consideration and direction will be key in advancing other financing mechanisms to fund initiatives such as LED streetlight conversions.

Strategic Partnerships

In these tough economic times, the importance of forming strategic partnerships that can help leverage our limited resources, cannot be overemphasized. In order to maximize opportunities for such partnerships, the City will need to remain innovative and nimble. The City's demonstration policy, while a first positive step to fostering such partnerships, may need to be expanded to afford more flexibility and encourage new technologies while fostering local job creation.

Communications and Engagement

Marketing and communication expenditures are severely restricted given the City's challenging budget situation; yet, in order for a number of the Green Vision goals to be realized, such as 50% energy reduction, communications with residents and businesses is key. In light of such limited resources for external communications, staff is targeting low or no cost avenues, such as City websites, and leveraging outreach through existing programs and outreach events. A City Green Team has also been initiated to raise awareness of the Green Vision throughout the organization and to target behavior change that will help save energy and water and reduce waste while lowering City operating costs. However, the fact remains that without an overall communications plan and budget, awareness and engagement of Green Vision amongst the City's residents and businesses will be limited.

Conclusion

The impressive accomplishments of the past year demonstrate the City's commitment to advancing the Green Vision; however, given the long term and ambitious goal targets, there is substantial work ahead of us. The continued fiscal challenges facing the City are many and finding a way to retain momentum on green initiatives is going to be challenging for the City as well as its residents. It is thus critical to be able to look at these initiatives in the broader context of opportunities for economic benefits and an improved quality of life.

Introduction

In October 2007, Council adopted the Green Vision, a 15 year plan that outlines ten ambitious goals for economic growth and environmental sustainability. San José plans to model the way for economic growth and environmental sustainability by developing new industries, becoming more energy efficient, producing and using electricity from clean, renewable, sources, building green buildings, diverting waste from landfills, and expanding delivery of recycled water. The goals will be measured by a triple bottom line: economic growth, environmental sustainability, and an enhanced quality of life for San José residents and businesses.



San José, California

Both the global and local economic climate in 2009 remained extremely challenging. Credit continued to be difficult to obtain, the unemployment rate stayed above 10%, and both the State and the City continued to face large budget deficits. Fortunately, significant funding was injected into the economy this year for energy efficiency related projects as a result of passage of the American Reinvestment and Recovery Act (ARRA). On February 17, 2009, President Barack Obama signed the American Recovery and Reinvestment Act (Recovery Act) to stimulate the faltering economy and, specifically, to create or save 3.5 million jobs over the next two years. The large and complex \$787 billion stimulus package provides \$288 billion in tax relief, \$144 billion in state and local fiscal relief, and \$355 billion for federal social and spending programs.

In 2009, over \$50 million in Federal and State grant money, including federal stimulus dollars, that are targeted at fostering and building the green economy were allocated or awarded towards projects that will advance Green Vision goals. The Green Vision well positions the City and local companies to receive grant funds. Local companies received over \$80 million in federal tax credits that will spur expansions and hiring in sectors such as renewable energy. The economic outlook in the near future continues to look uncertain and the City will need to rely heavily on other financing mechanisms such as grants and strategic partnerships to fund initiatives and projects that will advance the Green Vision.

GREEN VISION GOALS

- Goal 1: Create 25,000 Clean Tech jobs as the World Center of Clean Tech Innovation*
- Goal 2: Reduce per capita energy use by 50 percent*
- Goal 3: Receive 100 percent of our electrical power from clean renewable sources*
- Goal 4: Build or retrofit 50 million square feet of green buildings*
- Goal 5: Divert 100 percent of the waste from our landfill and convert waste to energy*
- Goal 6: Recycle or beneficially reuse 100 percent of our wastewater (100 million gallons per day)*
- Goal 7: Adopt a General Plan with measurable standards for sustainable development*
- Goal 8: Ensure that 100 percent of public fleet vehicles run on alternative fuels*
- Goal 9: Plant 100,000 new trees and replace 100 percent of our streetlights with smart, zero-emission lighting*
- Goal 10: Create 100 miles of interconnected trails*

This report provides information on key 2009 Green Vision accomplishments along with the diverse challenges and strategic direction needed for realizing the long-term vision. The report also includes a proposed 2010 Work Plan.



San José City Hall - LEED-EB platinum

Strategic Framework

The 2009 Green Vision Work Plan status and 2010 Work Plan table (see Appendix) outlines focus areas for each goal within a strategic framework. As directed by Council in March 2009, the Work Plan has been developed with three screening criteria:

1. Does the initiative result in cost savings or additional revenue generation, especially in the General Fund?
2. Will the initiative generate investment from the private sector or from the Federal or State government?
3. Will the initiative make measurable progress on one or more of the 10 Green Vision goals?

The strategic framework helps connect the goals, implementation strategies, and project-level day to day actions to the broader intended outcomes of driving economic opportunity and growth, eliminating the structural budget deficit, demonstrating environmental leadership, and improving quality of life throughout the community.

The strategic framework is developed around the following five areas:

- **Leading by example** – Policies and practices that the City can modify or establish to advance the Green Vision priorities

A critical component of the Green Vision's success will be the City's ability to prove itself as a leader, not only by mapping a sustainable future for the City and its residents, but also by being an early adopter of a sustainable way of life. In order to do this the City needs to continue to review its existing policies and practices and modify them as necessary to help support and advance the Green Vision goals. In 2009, in light of the current economic downturn, the City has done this in several areas such as Clean Tech jobs and work force development, green buildings, zero waste and smart energy efficient street lighting.

- **Advocating policies at the regional, state and federal level** – Advocating legislative action and positioning the City to partner with other agencies on policy changes and development

Advocating policy at the state and federal level to help advance the Green Vision goals remains a high priority for the City, specifically in areas such as alternate energy and Clean Tech investment. The City also continues to engage major regional entities such as the Metropolitan Transportation Commission (MTC), the Valley Transportation Authority (VTA), the Santa Clara Valley Water District (SCVWD), the Bay Area Air Quality Monitoring District (BAAQMD), and the Pacific Gas & Electric Company (PG&E) among others, to ensure that policies at the regional level complement our goals and objectives.



View of City Hall tower from inside the Rotunda

- ***Financing mechanisms*** – Exploring new financing mechanisms such as grants, modified fee structures, and improvement districts, to supplement City dollars

The Green Vision is anticipated to bring San José to a healthier economic future; however, in many areas initial capital investment will be necessary. Staff is continually exploring other financing mechanisms to supplement City dollars such as grants, public private partnerships, and assessment districts and has been successful in obtaining substantial Federal and State grants for energy, trails, and recycled water infrastructure. In 2009, the City received over \$50 million in grant funding from the Federal Recovery Act and other Federal and State sources such as Caltrans and Prop 84, that will specifically help advance Green Vision goals.

- ***Forming strategic partnerships*** – Partnering with other entities, such as schools, universities, non-profits, and private corporations, to work towards common goals

In these tough economic times the importance of forming strategic partnerships cannot be over emphasized. As organizations strive to address the current economic challenges in an ever competitive global economy, doing more with less is critical to their survival. Adding to this are concerns about the sustainable future of the planet and the desire for many organizations to show themselves as responsible stewards of the environment. This creates the perfect opportunity for the City to seek out other entities such as schools, universities, non-profits and private corporations to work towards common goals by leveraging funds and resources.

- ***Communications and engagement*** – Communicating with key audiences to bring about awareness, acceptance, and action on all of the goals

Communicating with key audiences to bring about awareness, acceptance and action on all of the goals is an important component to change behavior and ultimately ensure the success of all ten goals. Through the strategic framework, targeted outreach and engagement would be ideally integrated at the goal level.

In 2009, given the severe budget constraints, low- or no-cost tactics were pursued to help raise awareness in our community about the Green Vision goals and provide information on how residents and businesses could contribute towards the success of the Green Vision. The limited communications resources available were directed to those activities that would reach a high number of residents, businesses, and employees in the most cost-effective manner. As in previous years, information about the City's Green Vision was distributed at a variety of events in our community targeted to reach general audiences, as well as Spanish- and Vietnamese-speaking residents. Events outreach was done through the City's One Voice events program, eight Pollution Prevention resource fairs, and a weekly Green Vision information booth that was part of the Tuesday Market at City Hall, held every Tuesday between April and September.

Throughout the year staff attended various conferences to present on program specific goals, such as trails. As part of the presentation, the Green Vision was highlighted and used to frame and contextualize the goal.

Citywide Implementation

A Green Vision Steering Committee of senior and executive staff members convenes on a regular basis to provide direction on key issues and ensure alignment with City priorities. Dedicated goal leads continue to lead the implementation efforts and advance the individual goals, with the City Manager's Office overseeing overall implementation and facilitating interdepartmental coordination. The Council is kept apprised of progress on the Green Vision through quarterly informational memoranda, which provide updates and highlight key strategic opportunities and challenges.

Climate Change and Greenhouse Gas Emissions

Climate change refers to long-term changes in temperature, precipitation, wind patterns, and other elements of the earth's climate system. The Intergovernmental Panel on Climate Change (IPCC) defines climate change as "any change in climate over time, whether due to natural variability or as a result of human activity." An ever-increasing body of scientific research attributes these climatic changes to the emission of greenhouse gases (GHGs), particularly those generated from the human production and use of fossil fuels. To lead California in addressing climate change, Governor Schwarzenegger signed Assembly Bill 32 (AB 32), the Global Warming Solutions Act of 2006. AB 32 requires the State to reduce GHG emissions to 1990 levels by 2020. Executive Order S-3-05 added a long-term requirement to extend the State's GHG emissions reduction goals to 80 % below 1990 levels by 2050. In December 2008, the State requested that local governments reduce GHG emissions to at least 15% below current levels to help California achieve its 2020 goal. At this stage, GHG emissions reductions are not mandated by the State. Prior to adopting the 2008 AB 32 Scoping Plan Document, the State recommended 1990 as the common baseline year. However, in 2008, the State added flexibility for local governments in recognition that verifiable 1990 data was not consistently available.



Adopted Municipal Greenhouse Gas Goals

While developing an inventory of municipal and community GHG emissions, staff found that accurate 1990 emissions data was not available for either the community or municipal operations. Verifiable community emissions data was, however, available for 2005. Since the data from 2005 is also more reflective of current emissions, and 2005 is the baseline year used by many of the other cities throughout the State of California as well as the baseline chosen for the California SB 375 regional GHG reduction methodology (currently under development), staff recommended revised goals consistent with Council's 2007 direction to set aggressive goals while changing the baseline year to 2005. On January 12, 2010, Council adopted the following revised greenhouse gas reduction goals.

2015:	GHG emissions 15% below 2005 levels;
2020:	GHG emissions 20% below 2005 levels;
2030:	GHG emissions 35% below 2005 levels;
2040:	GHG emissions 65% below 2005 levels;
2050:	GHG emissions 80% below 2005 levels.

The revised reduction goals are aggressive, long-term goals that continue San José's environmental leadership role and will be additional indicators of investments San José is making today through the Green Vision and Envision San José 2040 General Plan update.

Climate Action Plan Integration with Envision San José 2040 General Plan

Climate change is considered a significant environmental impact and the State is developing guidelines on how this should be addressed. The State Attorney General has stated that, "achieving the state's proposed reductions will be a challenging task, especially since California's population is expected to grow from about 38 million in 2007 to 60 million in 2050 and he is committed to doing everything in his power to ensure that the goals are achieved". To that end, the Attorney General's Office is reviewing the adequacy of the Climate Action element as part of the California Environmental Quality Act (CEQA) process for updates of local General Plans. Thus, staff is developing the Climate Action Plan to meet the State's CEQA requirement as part of the Envision San José 2040 General Plan update.

Interim Green Vision Greenhouse Gas Reporting

A draft Climate Action Plan will be presented to Council, in conjunction with the draft Envision San José 2040 General Plan update. The final draft Climate Action Plan will also be submitted to the California Attorney General's Office for review. Any comments received will be incorporated into a revised Climate Action Plan prior to the adoption of the Envision San José 2040 General Plan update in June 2011. In the interim, the San José Green Vision will continue to serve as the City's roadmap to address climate change. Implementation of Green Vision's goals related to clean technology, energy, green buildings, water, waste, sustainable growth, trees, and trails will continue to help San José reduce GHG emissions to exceed San Jose's 2020 reduction goals.

The 2009 Green Vision Annual Report outlines the estimated reduction in metric tons of CO₂ equivalent emissions by 2022, based on the proposed community reduction goals and also provides information on the impact of the 15-year Green Vision on GHG emissions reductions in San José. Council will be kept apprised of the City's progress in meeting the GHG emissions reduction goals through regular monitoring of the implementation of the Envision San José 2040 General Plan.

In 2007, the City's emission numbers, excluding emissions from transportation, were 4.32 million metric tons (MMT). By 2022, achievement of Green Vision goals will reduce emissions to approximately 2.46 MMT, which will enable the City to stay on track to meet and exceed the Council adopted GHG emission reduction targets. These targets are based on 2005 baseline numbers and at this time, the Green Vision is projected to exceed targets in 2022 by 13%. A Climate Action Plan, which is being developed in tandem with the General Plan Update process, will further refine the road map and provide a comprehensive strategy, including transportation emissions, to reduce greenhouse gas emissions.

Urban Environmental Accords

San José City Council became a signatory to the Urban Environmental Accords in November, 2005. The Accords were developed as part of the 2005 United Nations Environment Day conference and consist of 21 “actions” designed to help cities across the world move towards greater sustainability. The Actions fall into seven categories: Energy, Waste Reduction, Urban Design, Urban Nature, Transportation, Environmental Health, and Water. To date, over 114 cities worldwide have signed on to the Accords. San José has completed thirteen of the Actions and work is underway on to complete all of them.



By working to complete the Urban Environmental Accords in conjunction with the ten Green Vision goals, the City of San José is well positioned to become a national leader in environmental sustainability, improving the quality of life and the environment for its residents while fostering a vibrant and sustainable economy.

Progress to Date

The following Actions are considered completed:

Urban Environmental Accords Action	Related Initiatives or Policies
<i>Action 1:</i> Adopt and implement a policy to increase the use of renewable energy to meet 10 percent of the City’s peak electric load within 7 years	The City has adopted and is implementing its Strategic Energy Plan (2009) and Green Vision (2007), both of which have the goal of reducing energy use by 50% and obtaining 100% of the City’s electricity from renewable sources. See the chapters on <i>Reduce Energy Use by 50%</i> and <i>Receive 100% of our Electrical Power Renewable Sources</i> for more information.
<i>Action 2:</i> Adopt and implement a policy to reduce the city’s peak electric load by 10% within 7 years through energy efficiency, shifting the timing of energy demands, and conservation measures.	See number 1 above.
<i>Action 4:</i> Establish a policy to achieve zero waste to landfills and incinerators by 2040.	City Council adopted a Zero Waste Strategic Plan in October, 2008. See the chapter <i>Divert 100% of Waste from Landfills and Covert Waste to Energy</i> for more information.
<i>Action 6:</i> Implement “user-friendly” recycling and composting programs, with the goal of reducing by 20% per capita solid waste disposal to landfill and incineration in seven years.	San José has been implementing innovative, recycling focused, integrated waste management programs since the early 1990’s. San José achieved an overall recycling rate of 66% in 2008. See the chapter <i>Divert 100% of Waste from Landfills and Covert Waste to Energy</i> for more information.
<i>Action 7:</i> Adopt a policy that mandates a green building rating system standard that applies to all new municipal buildings.	The City’s Green Building Policy for municipal buildings was adopted in 2001 and revised in 2008. Council also adopted a Green Building Ordinance for the private sector in 2009. See the chapter on <i>Build or Retrofit 50 Million</i>

Urban Environmental Accords Action	Related Initiatives or Policies
	<i>Square Feet of Green Buildings</i> for more information.
<i>Action 8:</i> Adopt urban planning principles and practices that advance higher density, mixed use, walkable, bikeable and disabled-accessible neighborhoods which coordinate land use and transportation with open space systems for recreation and ecological restoration.	San Jose adopted Smart Growth policies in the 1970s and each successive General Plan has reflected these principles. See the chapter on <i>Adopt a General Plan with Measurable Standards for Sustainable Development</i> for more information.
<i>Action 9:</i> Adopt a policy or implement a program that creates environmentally beneficial jobs in slums and/or low-income neighborhoods.	San Jose’s Work2Future program is working closely with numerous non-profits with similar goals. Green Vision Goal 1, 25,000 New Clean Tech jobs, also focuses on green jobs for all. Details can be found in the chapter <i>25,000 Clean Tech Jobs</i> .
<i>Action 12:</i> Pass legislation that protects critical habitat corridors and other key habitat characteristics (e.g. water features, food-bearing plants, shelter for wildlife, use of native species, etc.) from unsustainable development.	San José adopted its “Riparian Corridor Policy Study” in 1994 to prevent the loss of habitat to development in San Jose.
<i>Action 14:</i> Pass a law or implement a program that eliminates leaded gasoline (where it is still used); phases down sulfur levels in diesel and gasoline fuels, concurrent with using advance emission controls on all buses, taxis, and public fleets to reduce particulate matter and smog-forming emissions from those fleets by 50% in 7 years.	National laws addressing these concerns have been in place for decades.
<i>Action 18:</i> Establish an Air Quality Index (AQI) to measure the level of air pollution and set the goal of reducing by 10% in seven years the number of days categorized in the AQI range as “unhealthy” or “hazardous.”	The Bay Area Air Quality Management District has rules and regulations designed to minimize air pollution. It monitors air quality and is working to improve air quality on a continuous basis. The City participates in BAAQMD workgroups and there is a City Councilmember on the BAAQMD Board of Directors.
<i>Action 19:</i> Develop policies to increase access to adequate and safe drinking water aiming at access for all by 2015. For cities with potable water consumption greater than 100 liters per capita per day, adopt and implement policies to reduce consumption by 10% by 2015.	<ul style="list-style-type: none"> • Council approved a Water Conservation Plan in October, 2008. • Since the mid 1990s, San José has funded indoor water conservation and water recycling programs in support of the South Bay Action Plan to reduce freshwater discharges to the Bay. • The City has been working with the Santa Clara Valley Water District to look at opportunities to expand the use of recycled water in lieu of potable water.
<i>Action 20:</i> Protect the ecological integrity of the City’s primary drinking water source (i.e. aquifers, rivers, lakes, wetlands and associated ecosystems).	The City supports Santa Clara Valley Water District efforts protecting the groundwater supply and local reservoirs.
<i>Action 21:</i> Adopt municipal wastewater management guidelines and reduce the	<ul style="list-style-type: none"> • The City owns and operates a tertiary Water Pollution Control Plant. It does not

Urban Environmental Accords Action	Related Initiatives or Policies
<p>volume of untreated wastewater discharge by 10% in seven years through the expanded use of recycled water and the implementation of a sustainable urban watershed planning process that includes participants of all affected communities and is based on sound economic, social, and environmental principles</p>	<p>discharge any untreated municipal wastewater to local receiving waters.</p> <ul style="list-style-type: none"> • The City currently recycles approximately 13% of its treated wastewater and is actively working with the Santa Clara Valley Water District to look at opportunities to expand the use of recycled water in lieu of potable water. (See the chapter on <i>Recycle or Beneficially Reuse 100% of Wastewater</i>). • Since 1996, San Jose has participated in the Santa Clara Basin Watershed Management Initiative to address all sources of pollution that threaten the Bay, and to protect water quality throughout its watersheds.

While there is considerable overlap between the Accords and the goals of the Green Vision, not all activities towards completion of the Urban Environmental Accords are covered in this Report. Below are some highlights of what was achieved in 2009 to implement the Accords:

Urban Environmental Accords Action	2009 Achievements and Milestones	Next Steps
<p><i>Energy</i></p> <ol style="list-style-type: none"> 1. Renewable Energy 2. Energy Efficiency 3. Greenhouse Gas Reductions 	<p>See chapters on <i>Reduce Energy Use by 50%</i> and <i>Receive 100% of our Electrical Power Renewable Sources</i>. Additionally, the City's Greenhouse Gas reduction activities are discussed in the chapter entitled <i>Climate Change and Greenhouse Gas Emissions</i> and in each goal chapter.</p>	<p>See chapters on <i>Climate Change and Greenhouse Gas Emissions</i>, <i>Reduce Energy Use by 50%</i>, <i>Receive 100% of our Electrical Power Renewable Sources</i>, and the climate change portions of each chapter.</p>
<p><i>Waste Reduction</i></p> <ol style="list-style-type: none"> 4. Zero Waste 5. Ban a Nonrenewable product from the City 6. Recycling Programs 	<p>See the <i>Divert 100% of Waste from Landfills and Covert Waste to Energy</i> chapter.</p> <p>In support of Action 5, the City is working to ban plastic and paper bags from distribution by City retailers by December 31, 2010 (excluding restaurants).</p> <p>The City's diversion rate was over 66% in 2009.</p>	<p>See the <i>Divert 100% of Waste from Landfills and Covert Waste to Energy</i> chapter. The bag ban ordinance is expected to be adopted mid year 2010.</p>
<p><i>Urban Design</i></p> <ol style="list-style-type: none"> 7. Municipal Green Building 8. Smart Growth 9. Green Jobs 	<p>2009 achievements in this category are discussed in the chapters on <i>25,000 Clean Tech Jobs, Build or Retrofit 50 Million Square Feet of Green Buildings, Adopt a General Plan with Measurable Standards for Sustainable</i></p>	<p>See chapters on <i>25,000 Clean Tech Jobs, Build or Retrofit 50 Million Square Feet of Green Buildings, Adopt a General Plan with Measurable Standards for Sustainable Development</i>.</p>

Urban Environmental Accords Action	2009 Achievements and Milestones	Next Steps
	<i>Development, respectively.</i>	
<p><i>Urban Nature</i> 10. Parkland Accessibility 11. Urban Forestry 12. Habitat Protection</p>	<p>Regarding Action 10, 94% of City residents live within 1/3 mile of parkland. There are 51 areas in the City that do not comply with Action 10, equating to 18,700 households. See the chapter on <i>Plant 100,000 Trees</i> regarding Action 11 (urban trees). Critical habitat corridors continue to be protected by the City's Riparian Corridor Policy Study (Action 12).</p>	<p>See chapter on <i>Plant 100,000 Trees</i>.</p>
<p><i>Transportation</i> 13. Public Transportation Access 14. Leaded Gasoline Reductions 15. Single Commuter Reductions</p>	<p>VTA continues to offer transit services for a significant portion (over 80%) of the "Urban" San Jose area (Action 13). Given ongoing budget cuts to transit this is unlikely to improve in the near term.</p> <p>To reduce commuting alone (Action 15), San Jose lead the following efforts in 2009:</p> <ul style="list-style-type: none"> • Provided mass transit "Eco-passes" for employees • Attained "New Starts Funding Program" eligibility for the BART to San Jose Project. • Completed MOU with the Santa Valley Transportation Authority to proceed with engineering and design of the Bus Rapid Transit Project. • Completed the Scoping Process for the California High Speed Rail Project. • Completed the City Bike Master Plan to increase bike commuting to 5%. • Initiated consultant selection process for the development of the Automated Transit/POD Car Network. 	<ul style="list-style-type: none"> • Complete 25 miles of new bikeways and install 500 new bike parking spaces • Complete BART Environmental Review. • Complete Preliminary Engineering Phase for Bus Rapid Transit Systems in San Jose. • Complete Draft Environmental Clearance for the California High Speed Rail project. • Complete RFP process for the Automated Transit or "POD Car" Network.
<p><i>Environmental Health</i> 16. Municipal Environmental Procurement 17. Local Organic Foods</p>	<ul style="list-style-type: none"> • The City's Senior Meal Program and Convention Center offer local organic foods from growers in 	<ul style="list-style-type: none"> • Continue to transition to environmentally sound cleaning products. • Expand use of local organic

Urban Environmental Accords Action	2009 Achievements and Milestones	Next Steps
18. Air Quality	<p>Salinas Valley.</p> <ul style="list-style-type: none"> • The new Guadalupe Community Garden opened in August, 2009 utilizes recycled water. • San Jose now has 19 community gardens which are utilized by nearly 1000 gardeners. • San Jose discontinued the use of hand cleaners containing Triclosan, a registered pesticide, in 2009 in support of Action 16. Triclosan can compromise water quality and bioaccumulate in animals and people. 	foods.
<p><i>Water</i></p> 19. Water Conservation 20. Water Quality Protection 21. Recycled Water and Watershed Management	<p>In response to a state-wide drought, a resolution was passed in 2009 declaring a 15% water shortage and trigger mandatory City-wide water conservation measures. An ordinance was passed to strengthen wastewater prevention and water shortage measures and to increase conservation outreach. 300,000 gallons of water was conserved through City programs.</p>	<p>Achieve 290 acre feet of water savings through a combination of indoor and outdoor programs aimed at businesses and residents.</p> <p>Work towards adoption of ordinances that 1) require dual plumbing as part of new building design for sites near the recycled water pipeline, and for large building designs planned throughout the City wastewater enforcement; 2) address landscaping, and 3) address wastewater enforcement. See the chapter on <i>Recycle or Beneficially Reuse 100% of Wastewater</i>.</p>

Another strategy San José uses to implement the Accords is to collaborate with other California signatory cities through Green Cities California (GCC). GCC's model environmental programs are available to the public through their well-received Best Practices Website <http://www.greencitiescalifornia.org/> launched in late 2009. Several San José programs are highlighted on this website.

Create 25,000 Clean Tech Jobs as the World Center of Clean Tech Innovation

As San José emerges as a world center of Clean Tech innovation, entrepreneurs, companies, and universities continue to develop technologies that will change the world and create economic opportunities for generations to come. To provide leadership for the long-term economic success of this emerging industry sector, the City developed its Clean Tech Strategy, which will be an integral component to achieving our Green Vision. The Strategy will ensure that this next wave of innovation occurs in San José and calls for unprecedented public-private partnerships to showcase Clean Tech products to the world, including:



Thin film solar technology

- Providing incentives and services at every stage of growth to encourage both established Clean Tech companies and start-up firms to stay and grow in San José;
- Incubating next generation technologies through partnerships with local universities and the Environmental Business Cluster;
- Attracting innovative firms and talent from around the world;
- Providing demonstration, testing and prototype manufacturing opportunities for innovative Clean Tech products;
- Creating opportunities for local residents to receive training for employment in Clean Tech industries;
- Advocating for legislative changes that will support the Clean Tech industry's growth.

The Clean Tech Strategy builds on San José's long-standing tradition of innovation and strong national leadership in emerging technologies. Clean Tech innovations will harness the power of renewable energy sources, manage natural resources more efficiently, and reduce the environmental impacts of human activity while meeting the promise of economic prosperity for the region. San Jose's list of Clean Tech companies continues to grow as Sunpower, BioFuelBox, Borgata, Echelon, Fat Spaniel, Solexant, SoloPower, Stion, Nanosolar, SunWize, Sopogy, are joined by household names like Cisco and IBM who are also now investing and innovating in the clean tech arena. While the economy remains uncertain, and overall job creation numbers have been flat, the emerging clean technology sector continues to attract attention and investment, and enjoy modest job growth.

With the transition to a clean energy economy, there is an increased market demand for clean tech products and services. Despite a well-chronicled recessionary economy, the core green economy in California is growing more rapidly than the economy as a whole and continues to offer a range of job opportunities across all skill levels. The same holds true for San José despite

an unemployment rate of 13% that has outpaced California and the rest of the United States and all-time high foreclosure and vacancy rates. Venture capital investment in clean technology in Silicon Valley was \$1.2B in 2009, (and totaled over \$4B for the last three years), and government investment in the emerging clean tech sector remains at an all-time high.

There are many approaches for measuring the growth of the emerging clean tech sector. Recently, however, a comprehensive model that captures employment figures in the core green economy is becoming more widely accepted. It captures fifteen segments that reflect the many different factors associated with mitigating the sources and impacts of climate change including: energy generation, energy efficiency, transportation, energy storage, recycling and waste, research and advocacy, green building among others are captured. At its base, the core green economy consists of businesses that provide products and services that:

- provide alternatives to carbon-based energy sources;
- conserve the use of energy and all natural resources;
- reduce pollution (including GHG emissions) and repurpose waste.

BioFuelBox wins International World Economic Forum Pioneer Technology AWARD.

On December 3, 2009 in Davos, Switzerland, yet another great example of San Jose inspired-green technology, BioFuelBox, was honored by the World Economic Forum with the prestigious Technology Innovator Award. BioFuelBox is being recognized for their revolutionary technology that converts waste fats, oils and greases into diesel fuel for use in any diesel engine.

In addition to receiving the Technology Innovator award, BioFuelBox was also selected to host a clean tech panel at the World Economic Forum, where they will moderate the discussion.

The data is drawn from National Establishments Time Series (NETS) database based on Dun & Bradstreet business unit data, and New Energy Finance and the Cleantech Group™, LLC for purposes of identification and classification of green businesses. The approach provides the best indicator of the emerging clean tech sector – and provides an accepted methodology for measuring growth in this dynamic sector. There are 4,027 jobs in the core green economy in San José - with energy efficiency, and energy generation and infrastructure accounting for over three fourths of the jobs. The Bay Area maintains the highest level of employment concentrations in California, a sign that businesses cluster here to draw on the many assets in the region, such as venture capital access, research institutions, incubation services, and industry consortiums.

Achievements & Successes:

Named “Best City in U.S. for Clean Tech”: In May of 2009, Business Week named San José the best city in the United States for Clean Technology, and recognized the regional assets that support innovation and entrepreneurship in San José. Top notch University led research, a prolific venture capital network, a vibrant incubator network, industry partnerships, and a supportive policy framework throughout the region create ample opportunity for emerging clean tech company successes.

International Economic Development Council Award: In October of 2009, the International Economic Development Council (IEDC) recognized San Jose’s Green Vision as the best Sustainability Program in the United States as it seeks to leverage broad environmental goals and an economic development strategy for clean technology focused on incubation and

commercialization, workforce development, and targeted business attraction and retention efforts in the emerging clean tech sector.

CleanTech Open: The Cleantech Open (CTO) has established itself as the leader in developing clean technology startup entrepreneurs addressing these challenges. Since its inception in 2006, 125 promising teams have availed themselves of the Cleantech Open's one-of-a-kind hands-on workforce development, nurturing, and funding programs. San José supported the CTO this year providing the *San Jose Prize for Green Vision Innovation*, which funded incubation space and services at the award winning Environmental Business Cluster (EBC).

Demonstration/Innovation A logical extension of our incubator network in San José is to provide opportunities for commercialization through demonstration, pilot and early stage manufacturing of clean technology products. To that end, the City applied to the Economic Development Agency (EDA) for funding to establish a Clean Tech Demonstration Center. The Center is envisioned as a clean tech innovation, development and demonstration facility for solar energy, green fleet vehicles, and green building/energy efficiency technologies emerging from the incubator network and from across Silicon Valley. It will also be a community environmental training and incubation center that will provide entrepreneurship training opportunities and prototype manufacturing jobs for low/moderate income residents.

Solexant: R&D 100 Award innovative thin film PV technology The editors of *R&D Magazine* have named Solexant Corp., developer of third generation ultrathin film PV technology, a winner of its 47th Annual R&D 100 Awards for the most technologically significant products introduced in the past year. Solexant's Nanocrystal Solar Cell, developed at Lawrence Berkeley National Lab (LBNL), is the first solar cell based on ultrathin films incorporating nanocrystals made of high performance, inorganic materials. Solexant combines high efficiency materials with additional manufacturing innovations to achieve cost savings of up to 50% compared to other PV technologies. The long standing R&D 100 Awards are a mark of excellence known to industry, government, and academia as evidence that a new product has merit as a genuine innovation. Among this year's winners are Ford, Dow Chemical, Thermo Fisher scientific, Agilent, Hitachi, Battelle, and Intel. Past winning technologies have included the fax machine, liquid crystal display, and HDTV.

State and Federal interest in innovation in the emerging clean tech sector remains at an all time high. The City submitted an application to the State for designation as an Innovation Hub (i-Hub) with the aim of fostering commercialization of clean and emerging technologies at all stages of development through greater collaboration. The City's partners include: universities, industry associations, and business assistance organizations. The i-Hub consortium brings together an impressive list of founding contributors including but not limited to: San Jose State University, UC Santa Cruz, Joint Venture: Silicon Valley Network, San Jose Silicon Valley Chamber of Commerce, work2future, BusinessOwnerSpace.com, San Jose State University Foundation, the Environmental Business Cluster and other. The designation anticipates federal interest and funding for innovation clusters in the Economic Development Administration budget.

Foreign Investment:

Grow Your Green Sales in Europe Seminar: While Silicon Valley remains a hot spot for clean technology innovation and entrepreneurship, the transition to a clean energy economy is a distributed phenomenon with demand and supply centers all over the world. To foster international economic opportunities for San José area businesses in the Green Building sector, the City Office partnered with the U.S. Department of Commerce Commercial Service to host the “Grow Your Green Sales in Europe”



Mayor Chuck Reed at the Grow Your Green Sales in Europe seminar

business seminar at City Hall on November 6, 2009. The program in San José was one of four business seminars offered in the nation with Senior Commerce Officials from England, France, Germany, Sweden and Belgium in attendance.

Targeting Direct Investment: Through a partnership with OCO Global, the Office of Economic Development has engaged in targeting foreign direct investment in San Jose. This collaboration has identified over 200 companies within targeted industry sectors that have expressed an interest in investment or expansion in the US market. Through this work, San José has been exposed to numerous local chambers of commerce, regional economic organizations, industry organizations and local trade and investment agencies across Europe in addition to being represented at international trade shows, events and seminars.

La Baule World Investment Conference: Organized with the support of the European Commission, the Conference brought together more than 1,000 high-level global business leaders, top elected officials, academics and experts from around the world. A key part of the Conference was Transatlantic Green Platform which fosters transatlantic cooperation for clean technologies and green energies. In 2009, the focus was “Global Cities – Green Growth,” providing a platform for San José to be showcased among policymakers and investors seeking opportunities, innovation and partnerships.

Community Development Block Grants: The City has also been able to leverage Community Development Block Grant (CDBG) funds to support Clean Tech companies in San José. The City has created the Clean Tech Careers Fund to provide \$1.2 million in capital equipment financing to three companies that utilize clean & green technologies in San José. As a result of this capital equipment financing, sixty new jobs will be created, with half of the jobs going to low to moderate income families.

Work2future Workforce Training: Work2future continues to work with employers, institutions of higher learning, apprenticeship programs, and other training providers to provide

targeted training programs to assist low-income and other unemployed adults and at risk youth to find careers in clean tech and the green economy, and advance the goals of the Green Vision. For the fifth consecutive year, work2future met 100% of its federally mandated performance goals. As a recipient of nearly \$13 million of ARRA funds, work2future was able to serve over 900 youth and provide them with work experience programs that included linkages with green employers and also a variety of environmental related efforts. As a continuation of the summer work experience program work2future has recently launched its Green Cadre Program and is working with over 50 at risk youth to provide them with green career work experience, training in a variety of green areas, and foundational skill development all with the objective of promoting youth as environmental stewards in the future.

Recovery Act Tax Credits: As part of the Recovery Act, manufacturing tax credits (MTC) are focused on putting Americans back to work by building a robust domestic manufacturing capacity to supply clean and renewable energy projects with American made parts and equipment. These credits are also an important step towards meeting the President's goal of doubling the amount of renewable energy the country uses in the next three years with wind turbines and solar panels built right here in the United States. Recently announced DOE selections included San José clean tech companies:



- *Nanosolar*: will produce tools for the manufacturing of low-cost, low-GHG emission solar cells, using nanotechnology-enabled roll-to-roll processes. MTC: \$45,000,000;
- *Stion*: will manufacture high efficiency (11-12%+) CIGS thin-film photovoltaic modules on glass. The resulting technology will aid the domestic solar energy industry. MTC: \$37,500,000;
- *Sunpower*: will manufacture photovoltaic (PV) module manufacturing. MTC: \$2,700,000.

Department of Energy Next Generation Lighting: The Department of Energy announced more than \$37 million in funding from the American Recovery and Reinvestment Act to support high-efficiency solid-state lighting projects. Solid-state lighting, which uses light-emitting diodes (LEDs) and organic light-emitting diodes (OLEDs) instead of incandescent bulbs, has the potential to be ten times more energy-efficient than traditional incandescent lighting. Lighting accounts for approximately 24% of the total electricity generated in the United States today. By 2030, the development and widespread deployment of cost-effective solid-state lighting could reduce electricity use for lighting by one-third nationally. Included in the awards were San Jose companies *Philips Lumileds Lighting Co. LLC* (\$1.8 million and \$1.9 million) and *Ultratech Inc.* (\$1.3 million).

Legislation:

Legislative advocacy at the State and Federal level, coupled with coordinated pursuit of resources on behalf of supportive of the emerging clean tech sector in San José, remains critical. 2009 advocacy efforts included, but were not limited to: testimony on clean tech job creation that went before Senate Environment and Public Works Committee; presentations to the Department of Commerce, Economic Development Administration on innovation and commercialization; adoption of Mayor's Clean Tech legislative agenda by Council; advocacy on the California

Alternative Energy and Advanced Transportation Financing Authority (CAETFEA) bill, and urging expedited review of DOE loan guarantee applications.

Strategic Direction

Strategic direction and a targeted approach to key issues to catalyze the emerging green economy for the upcoming year are vital given limited City resources. Focus areas for 2010 include:

- *Increased flexibility around the demonstration policy.* This would allow for City demonstration of local clean technologies to further Green Vision goals, and drive economic development in the region. San José has successfully demonstrated emerging clean technologies such as LED lights and electric vehicle charging stations, and by its leadership the City helps establish a marketplace, and spur standards discussion and regulatory approval processes. Increased flexibility in the demonstration policy will allow for San José to lead by example and showcase Silicon Valley technologies, particularly those that are responding to the need to transition to a clean energy economy.
- *Create and enhance collaborative partnerships.* Partnerships that promote the City's clean technology economic development policies and programs, and leverage regional assets to attract funding will be focused on.
- *Enhanced support for commercialization.* Supporting activities such as demonstration, testing and early stage manufacturing of clean technologies in San José that are emerging from our incubator network, and across Silicon Valley will help create local jobs.
- *Continued support for emerging clean tech companies.* Incentives offered by competing regions outpace San José, and the competition to attract companies remains intense. San José attracts and retains clean tech businesses by providing business assistance including but not limited to: Enterprise Zone (Sales and Use Tax Credits, Hiring Tax Credits, Business Expense Deductions, Net Operating Loss Carryover and Net Interest Deduction for Lenders), Expedited Permitting Assistance (Special Tenant Improvements and Industrial Tool Installation Program), Workforce Assistance (Employment Panel Training Funds and Stimulus funds for On- the-Job Training), and Clean Tech funding opportunities.
- *Access to capital:* Crossing the “valley of death” from concept to commercialization remains a challenge for clean tech companies. Continued advocacy for investment in the emerging clean tech sector in Silicon Valley is critical. Nurturing relationships with venture capital community to facilitate development and location of companies in San José also presents a key opportunity.
- *Pursue and secure grant funding:* Pursuit of federal and state grant money to support emerging clean tech sector demonstration projects, such as smart grid, clean transportation, and renewable energy, incubators and innovation clusters is a key priority in the current economic climate.
- *Partner with industries to identify existing and future workforce demands.* Supporting job training, apprenticeship, education and workforce development programs for residents with a variety of skills and income levels will help to develop a workforce in San José for clean technology industries.

Climate Change

California has led the country in adopting a forward thinking clean energy framework from Title 24, to decoupling of energy profits, the recent adoption of the low carbon fuel standard by the California Air Resources Board, and to the California Global Warming Solutions Act (AB 32) - our state has been at the forefront of energy policy in the United States. What is clear, however, is that technological advances, accelerated commercialization and ultimate adoption of clean technologies will be paramount if we are to achieve the substantial green house gas emissions reduction targets necessary to stem the tide of global warming.

San José’s Green Vision recognizes the dual purpose and promise of clean technology – an opportunity for the region to drive economic development and job creation, while supporting a critical path to carbon avoidance into the future. From CFLs to electric vehicles, from smart grid technologies and building efficiency technologies to next generation PV, biofuels, advanced lighting technologies and construction materials, companies are fast at work across Silicon Valley incubating, demonstrating, and conducting early stage manufacturing and creating go-to-market strategies for the next generation of clean goods.

Investors, entrepreneurs, business leaders and policy makers alike recognize the opportunity in clean technology. Security and prosperity associated with energy independence and a stable climate are at the heart of clean technology investment. Acceleration of this process will predictably require ongoing policy engagement, capital investment, fair and stable rules of the road and collaboration and coordination across multiple disciplines.

Work Plan

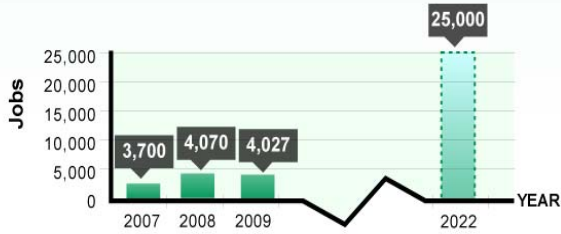
Strategic Focus	Proposed Strategy	2009 Work Plan	2010 Work Plan
Leading by Example			
Identify space for local clean tech companies to manufacture in San José	Work with key property owners and evaluate use of public lands for industrial development	Identify appropriate sites, including public land for 2M square feet of demand for manufacturing space Status: Nanosolar moving forward on 125,000 sq. ft expansion. Ongoing discussions with SoloPower.	Long range planning through Economic Development Strategy Update, General Plan Update and WPCP Master Plan effort to identify and designate lands for clean tech manufacturing.
Demonstrate clean transportation, renewable energy, smart grid and energy efficiency	Pursue increased flexibility in implementing demonstration policy to allow for more clean technologies deployed in San Jose facilities	N/A	Deploy demonstration projects in City owned buildings and land to support commercialization of clean technologies

Strategic Focus	Proposed Strategy	2009 Work Plan	2010 Work Plan
Greening of small businesses through BusinessOwners Space	Launch resources to support greening of small businesses	N/A	Develop a new Green Resource page on BusinessOwnerSpace.com
Advocating Policies			
Develop and implement policies to encourage expansion of existing, and development of new clean tech companies, and production and markets for clean tech products	Expand Fed/State incentives to promote manufacturing and consumer adoption of California products	Pursue implementation of adopted Clean Tech Legislative Agenda Status: Supported legislative efforts, funding opportunities and policy development to advance adopted Clean Tech Agenda.	Ongoing efforts to support Clean Tech Agenda.
Financing Mechanisms			
Support for incubators and commercialization of clean tech products, and innovation clusters	Compete for federal and state funding opportunities to support clean tech sector	N/A	Apply for grants at the federal and state level to support clean technology sector
Strategic Partnerships			
Coordinate workforce development Green initiatives for workforce development	Develop regional strategy to coordinate clean tech career training programs Well-trained, skilled workforce to support the clean tech sector	Identify key partners, inventory activities, align efforts, and launch programs Status: Completed RFI to identify curriculums in emerging green career sectors	Through the Cohort Training Pilot, job seekers will be able to take fully subsidized classes in peer groups. Nine courses will be offered in 2010, such as: solar photovoltaics installation, green building construction, water utilities technicians, and energy specialist training. The 2010 enrollment goal is 100+ participants, at a minimum of 15 trainees per course.

Performance Metrics

Clean Tech Jobs

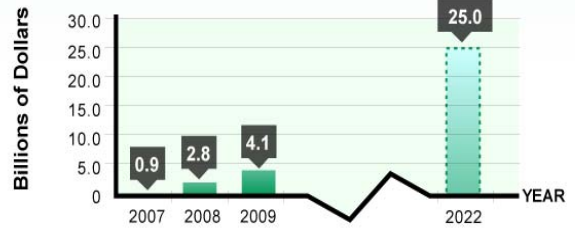
Target: 25,000 Jobs



Revised baseline number reflects clean tech jobs in San Jose based on Core Green Economy's metric which is a widely accepted industry metric at the national and regional level

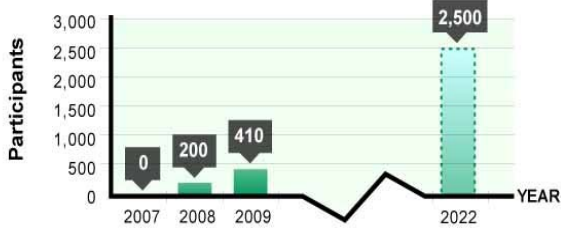
Cumulative Venture Capital Investments Locally

Target: \$25 Billion



Clean Tech-Ready Workers Trained

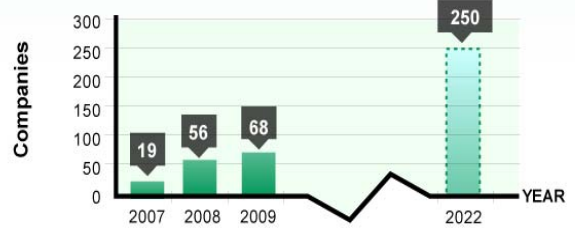
Target: 2,500 Participants



2009 data is pending.

Companies Locating / Expanding in San José

Target: 250 Companies



Reduce Per Capita Energy Use by 50%

Energy powers our lives. We depend on energy to run our days, our homes, and our businesses. Over eleven billion kilowatt hours of energy are used in San José each year. The largest energy users of energy within the city are the residential and commercial sectors. Currently, the majority of our energy comes from limited, nonrenewable resources. To ensure that we do not jeopardize future energy resources, it is critical to find ways to reduce our urban energy demands as well as sources of new, clean renewable energy.



Meeting our energy reduction goals will require significant deployment of resources and participation by all sectors of our community. One exciting component of the 2009 Recovery Act was the commitment to energy conservation and renewables at the municipal level. In addition to the competitive grant opportunities, the Recovery Act allocated specific amounts, based on population, to all governmental agencies with populations greater than 50K. San José was allocated over \$8.8M for projects that will reduce energy use at City facilities, install LED energy saving technology on City streetlights, and increase the use of renewables on city facilities. Other related programs include the Clean and Renewable Energy Bonds (CREBs), Qualified Energy Conservation Bonds (QECBs), Federal tax credits, and PG&E rebates for energy efficiency improvement measures such as installation of insulation, storm doors, high efficiency furnaces, or windows. The City has received approximately \$12 million in tax credit allocations under the CREBs and QECBs to install solar and energy efficiency projects at a variety of sites including the Municipal Water System pump stations.

A wealth of resources exists to assist both residents and businesses in increasing energy efficiency. San José is the administrator of PG&E's Silicon Valley Energy Watch program, which is focused on community energy efficiency. As administrators of that program, the City provides energy efficiency training workshops, residential and small business outreach, referrals to energy efficiency auditors and installers, and their tools to increase energy efficiency such as Kill-A-Watt meters (which measure energy usage) at one of three San José libraries. Numerous other agencies including PG&E and federal agencies including the U.S. Dept of Energy also provide resources. The Federal ENERGY STAR program, for example, offers energy efficiency product ratings and tools for improving energy management.

Easy Actions You Can Take Now

1. Replace incandescent bulbs with compact fluorescent (CFL) or LED lights.
2. Install low cost weather stripping along windows and doors. Check the San José energy site for more tips at www.sanjoseca.gov/esd/natural-energy-resources/ER-Tips-home.htm
3. Unplug appliances, TVs, and stereo equipment when not in use.
4. Replace old appliances with Energy Star appliances. Check for PG&E rebates at www.pge.com/rebates
5. Caulk around windows, doors, and plugs.
6. Make sure that your home or business is fully insulated.

Achievements & Successes

2009 focused on building the foundations to achieve the City's aggressive long term energy efficiency goals with particular emphasis on finding sufficient resources to launch the programs effectively. Successes include:

Establishment of City Energy Fund: Energy efficiency is very cost effective because the savings, once achieved, continue into the foreseeable future. The energy efficiency measures installed to date have had on average a four year payback period. To leverage that savings, Council agreed in 2007 to put the value of the first year of energy savings plus all rebates into an Energy Fund for reinvestment in additional energy saving projects. That fund also pays for an Energy Officer to manage the program. In 2009, Council approved expanding the Fund by putting the first two years of savings from energy efficiency projects into the Energy Fund. This expansion will enhance the benefit of the Energy Efficiency Community Block Grant and the Community Development Block Grants received in 2009. Savings beyond the first two years return to the General Fund.

Energy Efficiency and Conservation Block Grant (EECBG): The Recovery Act included \$3.2 billion for the Energy Efficiency Community Block grant program to fund projects related to energy efficiency and renewable energy. \$2.8 billion was distributed through formula allocation grants based on population. The remaining \$400 million will be distributed through competitive grants. San José received a formula allocation of \$8.8M which is allocated as follows:

- \$4.5 M for City facility energy efficiency projects;
- \$2.0 M for LED streetlights; and,
- \$2.3 M for solar projects on City facilities.



Staff anticipates that implementing the planned City facility energy efficiency projects during the three year term of EECBG funding will result in approximately \$ 422,000 in annual energy savings. First and second year savings from these project, along with any associated utility rebates, will be re-invested in the City's Energy Fund for future municipal energy efficiency and renewable energy projects.

Greening City Facilities: The City received a \$500,000 Community Development Block Grant to install energy efficiency improvements, such as lighting retrofits, window replacements, and water conservation measures, at 10 City facilities (fire stations, community centers, and libraries) and solar on 6 of these same buildings. The energy efficiency measures and solar arrays are projected to save approximately \$80,000 per year in energy costs. First and second year savings from these projects will be re-invested through the City's Energy fund. Additional energy efficiency projects included lighting and HVAC retrofits at several City facilities and parks, resulting in estimated total cost savings of approximately \$968,000.

Energy Improvement Districts: Assembly Bill 811, signed in July 2008, authorizes all cities and counties in California to develop/join programs wherein willing property owners can enter into contractual assessments to finance energy efficiency and solar and repay the loans on their tax bill over 20 years. The improvements would be transferable to a future property owner, in the event of a property transfer.

Council has authorized the City to join the CaliforniaFIRST, program, which is being managed by the California Statewide Communities Development Authority (CSCDA). The program is currently in the due diligence stage. CSCDA staff anticipates that the program will be available for public enrollment in June or July 2010.

Strategic Energy Plan: Council approved a Strategic Energy Plan in June 2009. The Plan focused the first phase of the implementation on municipal energy efficiency and installation of solar equivalent to municipal electricity use. In April 2010, staff will return to Council with the Energy Action Plan, which will focus on achieving the balance of Green Vision goals 2 and 3 – 50% reduction in energy use and generating renewable energy equivalent to 100% of electricity use citywide.

Western Appliance was recognized by both the U.S. Environmental Protection Agency and the California Energy Commission for its focus on selling Energy Star Appliances to our community. Western Appliance provides up-to-date information to consumers on Energy Star appliances and their benefits.

Community Energy Efficiency: The City has been PG&E's Local Government Partner, managing the Santa Clara County/Silicon Valley Energy Watch Programs, since 2004. The Program focuses on county-wide education, outreach, marketing, and coordination of energy efficiency and renewable energy services and technologies. During 2009, approximately 5,400 customers were served in San José.

The 2010-2012 program will focus on energy efficiency throughout Santa Clara County, particularly focused in the following four areas:

Education, Outreach, and Policy Coordination: Professional trainings and community workshops; municipal outreach and coordination throughout the County, support for ARRA-funded energy efficiency activities, and related workforce development activities; and support for the development of enhanced energy codes and standards. February 2010 will see the launch of the Silicon Valley Energy Map, a database driven online map that will display energy use, efficiency projects, green building, and solar installations. The Map will be freely available to the public as an outreach, education, and marketing tool.



*Silicon Valley Energy Watch
outreach event*

Small Business and Non Profit Energy Savings: Coordination and outreach support for energy audits, retrofits, and rebates for small business and non-profits through Ecology Action. Ecology Action, which has a separate contract with PG&E, will be responsible for delivering on-site installations. The City will focus on marketing the program to hard-to-reach and minority-owned businesses.

Municipal and Non Profit Energy Savings: Working with Ecology Action, the program will coordinate energy audits, retrofits and rebates for local government facilities throughout the County.

Low and Moderate Income Residential Energy Savings: Working with PG&E's Low Income Energy Efficiency (LIEE)¹ program, the City will provide strategic planning, overall program development, coordination, and outreach in a new initiative to expand the LIEE program to serve all PG&E customers with less than 80% of the area median income. This will bring the low income residential energy efficiency services into greater alignment with Silicon Valley economic reality. Program services will focus at the neighborhood level and be administered in conjunction with a comprehensive environmental education program.

Legislation

Two pieces of legislation sponsored by PG&E in 2009 could have a chilling impact on energy conservation and renewable energy. In 2009, PG&E got authority from the CA Public Utility Commission to increase rates for the lowest two tiers of energy use and decrease rates on the higher tiers. Prior to this change, the lowest users paid very little for their electricity and the cost per kilowatt rose significantly as energy use increased. Under the new structure, those who use the least energy will see their bills increase while those who use the most will see a cost decrease. The resulting rates reduce the financial incentive to save energy, particularly for those who use the most energy.

In January 2010, PG&E succeeded in collecting enough signatures to place an initiative which they call the "Taxpayers Right to Vote" Act on the June 2010 ballot. The initiative would force local governments that want to provide renewable energy to their residents to get approval from 2/3 of the taxpayers before the project commences. This initiative directly attacks the right of cities, granted by the CA Public Utilities Commission but not yet implemented, to establish Community Choice Aggregation projects – projects that install solar on city or community land and sell the power to local businesses and residents without going through PG&E. This is the same idea as micro-grids – developing renewable energy in a business district or multifamily or commercial complex and selling it to all of the local users. The League of Cities and the League of Women Voters, among many others, are opposing this initiative.

Ecology Action is San José's partner for implementation of small business, non profit, and municipal energy audits and direct installations. This partnership is part of the City's Silicon Valley Energy Watch program, a partnership with PG&E providing energy efficiency outreach, education, and coordination to all of Santa Clara County. Ecology Action is a non profit organization with extensive experience in the energy field. As an example of the program's success, Ecology Action worked with the San José Fairmont Hotel to reduce their total energy use by 9 percent – over a million kilowatt hours – which saved the Fairmont more than \$300,000 in utility expenses annually.

¹ LIEE is a statewide program administered by PG&E and the other Investor Owned Utilities, under the auspices of the CPUC, to deliver energy efficiency audits and retrofits to low income customers, defined as households under 200% of the Federal Poverty Level. Program services are available to homeowners as well as renters.

Strategic Direction

Reducing energy use per capita by 50% throughout the City will require technological, behavioral, and policy changes in all sectors of the community. San José will continue to work with its stakeholders and partners, including PG&E, public and non profit implementers, educational institutions, and community groups, to ensure ongoing, innovative, community-wide efforts to reduce energy use. Efforts will need to span sectors, encompass strategic partnerships, and include broad education as well as technological innovation. The Silicon Valley Energy Watch and Solar America Cities programs are two examples of such comprehensive programs.

Climate Change:

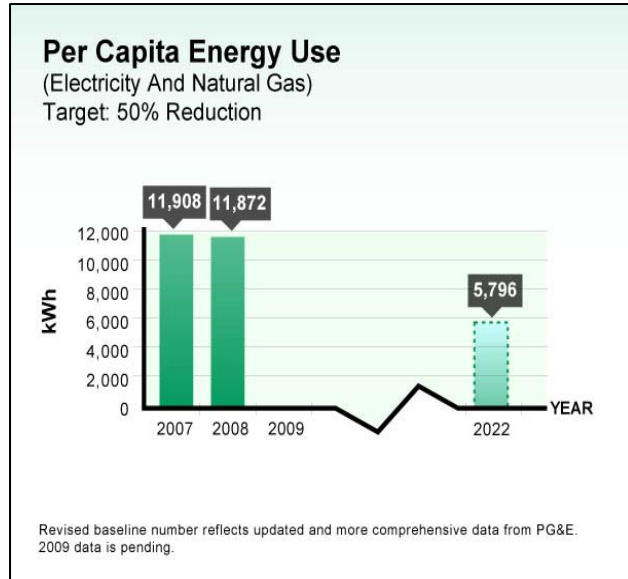
In 2007, San José’s population of 973,627 emitted approximately 4,039,360 metric tons (MT) (4.0 million metric tons (MMT)) of CO₂ based on electricity and natural gas use. San José is projected to grow to approximately 1.175 million people by 2022. Taking into account project population growth, per capita emissions reductions based on achieving this goal will lower greenhouse gas emissions to 2,437,844 MT (2.4 MMT). Reducing energy use by 50% per capita, and reducing corresponding greenhouse gas emissions from energy use, both electric and natural gas sources, will take a concerted effort from all residents and businesses.

Work Plan

Strategic Focus	Proposed Strategy	2009 Work Plan	2010 Work Plan
Leading by Example			
Implement energy efficiency projects in City facilities	Partner with PG&E to conduct audits; identify additional sources of funds for energy efficiency projects	Complete 20 energy audits and energy efficiency projects that save at least 20% one year after implementation Status: Completed 27 audits. Installed energy efficiency projects at 21 City facilities. Reduced citywide energy usage by 4.3%. First two years savings redirected to City Energy Fund	Complete 35 energy audits and related energy efficiency projects. Reduce municipal energy use by 5%.
Advocating Policies			
Identify & remove barriers to creating energy improvement areas and smart grids	Work with PG&E, California Energy Commission and CPUC to advance use of energy areas or smart grids; Implement AB811 or PACE financing districts that will encompass both solar and energy efficiency installation, to be rolled out in conjunction with community education efforts;	Explore potential for smart grid pilot within one or more areas of San José Status: No funding received to implement a smart grid project in San José. Council approved initiating action to become a pilot program for the CaliforniaFirst AB811/PACE program.	Support state legislation to enable cities and companies to effectively offer community choices including microgrids and energy improvement districts. Launch the CaliforniaFirst program with outreach to residents and businesses. Pursue funding opportunities.

Strategic Focus	Proposed Strategy	2009 Work Plan	2010 Work Plan
Financing Mechanisms			
Support energy efficiency programs and retrofits	Facilitate collaboration between various community providers to develop new and existing funding mechanisms for energy efficiency improvements	10 nonprofits and other service agencies receive funding for energy efficiency improvements Status: 15 nonprofits and 90 businesses were served.	Implement Silicon Valley Energy Watch energy efficiency education and outreach programs. Provide approximately 250 moderate-income homes with energy efficiency education, audits, and direct installation of energy efficiency measures
Strategic Partnerships			
Expand knowledge and awareness of energy efficiency program resources	Work in partnership with businesses, energy resource providers, Bay Area Air Quality Management Association, and organizations throughout community	10% increase in number of San José residents and businesses receiving energy efficiency services Status: Contracted with PG&E to provide community energy efficiency education and referral to audit and energy efficiency project implementation funded by PG&E. Began work to link energy efficiency programs to workforce development activities, including training, apprenticeships, and volunteer opportunities.	Implement Silicon Valley Energy Watch small business and nonprofit audit and retrofit programs. Implement Low/Moderate Income Energy Efficiency program for residents between 200% of Federal Poverty level and 80% County Median Income. Work with Work2Future, local educational institutions, and other workforce development organizations to link them with energy efficiency-related workforce development opportunities.
Communications and Engagement:			
Implement community-wide energy efficiency programs	Implement the Strategic Energy Plan. Increase demand for energy efficiency and clean energy education and resources; Increase the number of local residents, agencies, and businesses who, by leading by example, become energy efficiency and clean energy “ambassadors.”	Develop Strategic Energy Plan. Status: Council approved Strategic Energy Plan in June 2009. Applied for funding to implement the Energy Plan. The City received \$10.8M in energy efficiency and solar implementation grants as a result. Many other grant applications are still being reviewed. Began implementation of priority recommendations within SEP.	Adoption of Strategic Energy Action Plan by Council in April 2010. Coordinate with regional efforts to obtain funding for Comprehensive Residential Retrofit Programs. Implement the Silicon Valley Energy Map

Performance Metrics



Receive 100% of Our Electrical Power from Clean, Renewable Sources

San José's aggressive goal of receiving 100% of our electrical power from clean, renewable sources by 2022 builds on the State's renewable energy goals of receiving 33 percent of energy from renewable sources by 2020. Obtaining 100% of the City's electrical power from clean, renewable sources such as solar, wind, fuel cell, biomass, landfill gas, and municipal solid waste will require the formation of strong partnerships, development and piloting of new, clean technologies, and inspiring widespread adoption. It will also require significant investment. Measuring the achievement of this goal will include the renewable energy generated within the City limits, recognizing the contribution of PG&E's renewable portfolio, and, possibly investment in additional generation outside of the City limits.



Generating solar power in residential neighborhoods

San José is particularly well situated both geographically, and climatically, to capitalize on solar energy. As a U.S. Department of Energy designated Solar America City, San José is committed to working together with its community partners to develop a sustainable solar infrastructure and demonstrate to the world that responsible environmental stewardship, economic vitality and collaboration are all elements of achieving a sustainable future.

By the end of 2009, 1,554 solar photovoltaic (PV) systems, totaling 15 MW, had been installed in San José. This is the equivalent of 5,000 3.0 kW residential systems and is the most solar installed in any large city in Northern California.

The San José/Santa Clara Water Treatment Plant is currently producing 53% of its power from methane from its own processes and the adjacent landfill. In order to supplement this energy, the Water Treatment Plant released a Request for Proposals for a fuel cell project, and the City entered into negotiations to lease 40-acres of San José/Santa Clara Water Pollution Control Plant Lands to the Zero Waste Energy Development Company to site a privately run dry anaerobic digestion facility to produce biogas.

Easy Actions You Can Take Now

1. Complete an energy efficiency audit and make sure to take advantage of all the cost-effective ways to save energy and money in your home or business. By reducing your energy use, you reduce the need for larger renewable energy systems such as a solar array, saving thousands in up-front installation costs. For more information visit www.sanjoseca.gov/esd/natural-energy-resources/ER-SolarElectric.htm
2. Educate yourself on solar opportunities available for your home or business—a good starting point is the State of California's website: www.gosolarcalifornia.org

Adobe Systems also installed small-scale wind turbines on their downtown towers. This represents one of the first wind energy installations in the City.

Achievements & Successes:

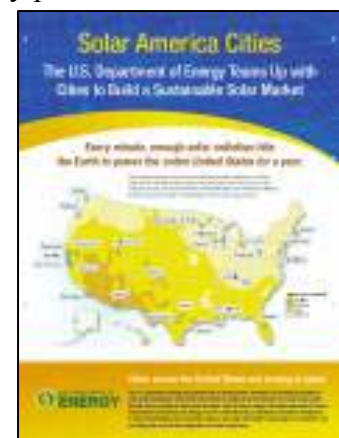
50 MW of Solar on City Facilities:

One key focus of the Strategic Energy Plan is installing 50 MW of solar on City facilities. 50 MW is enough solar power to meet half of the municipal 2006 electricity usage, i.e., enough to meet municipal needs after Green Vision Goal Reduce Energy Use by 50% is reached. 2009 progress includes:

- *Solar assessment of all 400+ City sites initiated.* The assessment will be completed by Spring 2010. The installations will likely be rolled out in 5-10 MW packages, based on the results of the site assessments and available funding.
- *Community Development Block grants.* Using Community Development Block grant (CDBG) funds, solar photovoltaic (PV) arrays were installed on three community centers a library, and two fire stations. These systems will generate a total of approximately 20 kW of energy.
- *Central Service Yard Power Purchase Agreement (PPA).* In Fall 2009, the City released a Request for Proposals to install solar photovoltaic (PV) arrays at the City's Central Service Yard and Mabury Service Yard. Four proposals were received and the City negotiated an agreement with DRI/Sun Edison, the winning proposers. The approved package will install 1.3 MW of solar at the Central Service yard. Average annual energy cost savings, estimated at \$27,000, will be directed to the City Energy Fund for the first two years and to the General Fund in subsequent years.
- *Airport:* The Airport is planning to install two 1MW solar arrays in 2010. A 1 MW photovoltaic system is slated for the new car rental garage facility, and an additional 1 MW of solar at the Green Island long term parking lot is currently being evaluated
- *Muni Water:* The Municipal Water Program is planning to install over 0.5MW of solar at its pump stations and reservoirs in 2010.

Fire Safety and Photovoltaics DVD and Training Workshop: Fighting fires on buildings with photovoltaics requires extra precautions due to a number of issues including the weight of the solar arrays on the roof and the large batteries that are usually present. As more solar power is installed on a variety of buildings, firefighters have to be trained on the protocols of fighting fires when photovoltaics are present. The City's Fire Department produced a well received training DVD on Fire Safety and Photovoltaics which was distributed to over 500 fire departments nationwide. The City has also hosted training workshops on Photovoltaic and Fire Safety for 80 California firefighters from multiple jurisdictions in 2009. Workshop topics included how firefighters can identify the presence of a solar system when responding to a fire; the basic components of the system, possible risks to firefighters; and how to fight fires on solar equipped structures

Solar America City Grant: As one of only 25 cities nationwide



designated as a Department of Energy (DOE) Solar America City, San José was eligible to apply for a DOE Solar Market Transformation Special Project (Market Transformation) grant in July 2009. The goal of this grant, funded by the American Recovery and Reinvestment Act, is to enable the cities to increase solar energy use in their communities through innovative programs and policies that could be easily replicated across the nation. In the Fall of 2009, DOE announced that San José had been awarded \$1,101,636 to fund the following five proposed projects:

- Community Education on Clean Technology Financing Programs
- San José Credit Union Solar Financing Pilot-- Education
- Qualified Energy Conservation Bonds Feasibility Analysis
- Green Vision Education and Demonstration Program
- Solar Career Opportunities

For more information, see www.solaramericacities.energy.gov/cities/san_José/

The San José Unified School District (SJUSD) teamed up with Chevron Energy Solutions to install 5 megawatts of solar at multiple sites through a Power Purchase Agreement. The project, which required no capital investment by SJUSD, is expected to reduce the district's demand for utility power and provide significant energy savings over the life of the contract. SJUSD and its partners also took advantage of federal investment tax credits and incentives offered by the state's California Solar Initiative.

Solar Community Installations: In 2009, a total of 1,554 solar installations throughout San José totaling were generating 15 MW energy.

The Silicon Valley Energy Map, an on-line interactive map of solar and green building projects in San José is being developed. It will be launched for public viewing in 2010. Viewers will be able to see the locations of solar installation and green buildings by zip code. The GIS data layer is based on building permit information, interconnection data from the utility, and the approximate size and amount of energy produced.

Wind Energy Installations: Adobe Systems, located in downtown San José, installed wind spires at its downtown campus. The spires have the ability to generate up to 43 kW/hour, depending on the size of the spire and wind speeds.

Anaerobic Digestion: A significant step in converting organic waste to energy occurred in June 2009, when Council authorized staff to enter into negotiations to lease 40-acres of San José/Santa Clara Water Pollution Control Plant Lands to the Zero Waste Energy Development Company to site a privately run dry anaerobic digestion facility. The facility could eventually process up to 150,000 tons of organic waste per year. This would be the first such facility in the United States.



Adobe wind turbines

Fuel Cell: Two Requests for Proposals were issued in 2009; one for a 1.4MW fuel cell project at the Water Treatment Plant, and a second for a 0.5 MW project at City Hall. Proposals are due in early 2010 and installation is planned in the Fall.

Legislation

Staff continues to work with the California Public Utilities Commission on the implementation of AB2466. This legislation would enable cities to install and get credit for up to 1MW of solar beyond the demand for electricity at the site. This would enable the municipalities to install excess solar at one site and apply the value of that excess solar to the electricity bill for another site. The key outstanding issue is the valuation of the excess solar power. When lobbying for this bill, the cities had envisioned that they would receive the same retail value for the power that they currently get for the power that is being used on site. However, PG&E is arguing that the excess power should be valued at the wholesale rate that PG&E pays for other power. If the CPUC determines that cities should get the wholesale rather than the retail rate, it will not be cost-effective to install excess solar pursuant to AB2466.

Solar Tech Partnership: An industry consortium of which the City of San José is a founding member, SolarTech is working on key issues currently facing the solar industry and hindering widespread adoption of solar energy technologies. These areas include financing, performance, installations, workforce, permitting, and interconnection. As the industry matures solar energy needs to be measured and communicated in terms more indicative of market expectations such as the time it takes to install solar projects, cost, system reliability and long-term production. San José works with SolarTech on developing solutions for these issues through co-hosting events such as the Regional Renewable Energy Permitting symposium and Workforce Development Summit which brought together experts from various sectors to discuss solar system permitting and installation best practices, fire safety and solar; and workforce development opportunities in the City and beyond.

Strategic Direction

There are several policy issues that will need to be considered by Council as the City moves to install 50MW of solar to offset municipal electricity use. Chief among these will be how to most cost-effectively fund solar installations, how to optimize the benefit from solar on city land, and how to capture the savings for reinvestment. Staff will be coming to Council for discussion on these items during 2010.

Climate Change

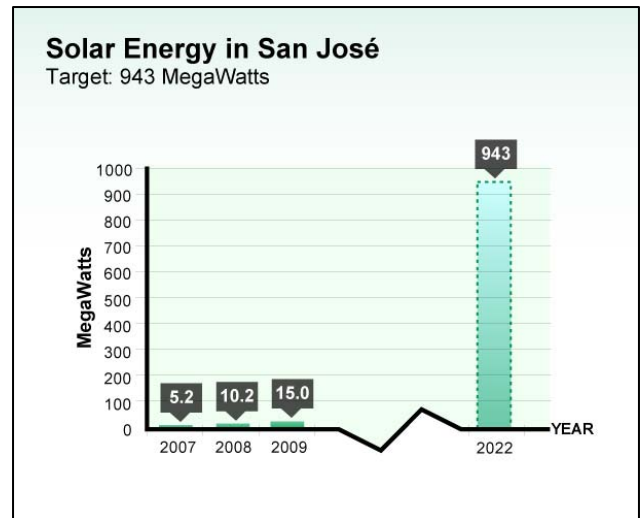
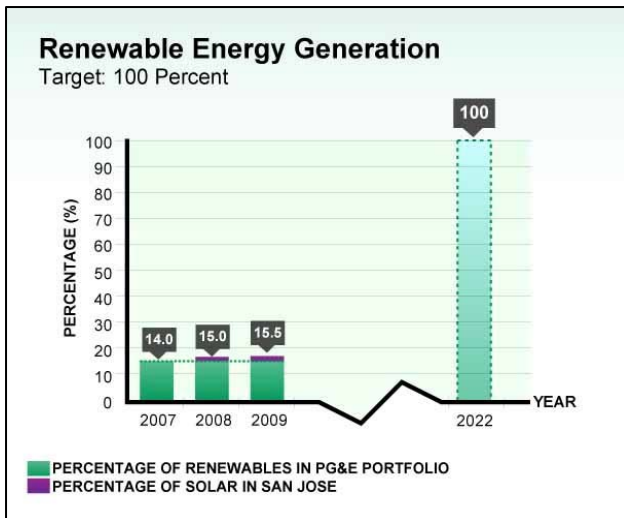
San José's currently receives the bulk of its electricity from PG&E. PG&E's [power mix](#) in 2008 consisted of non-emitting nuclear generation (22 percent), large hydroelectric facilities (16 percent) and renewable resources (14 percent), such as wind, geothermal, biomass and small hydro. The remaining portion came from natural gas (39 percent), coal (8 percent), and other fossil-based resources (1 percent). San José's total electricity use in 2007 resulted in 1,547,256 metric tons (1.55 MMT) of CO₂. Given that San José plans to achieve generating 100% of required electrical power from renewable sources, the projected CO₂ emissions in 2022 from electricity is anticipated to be reduced to zero.

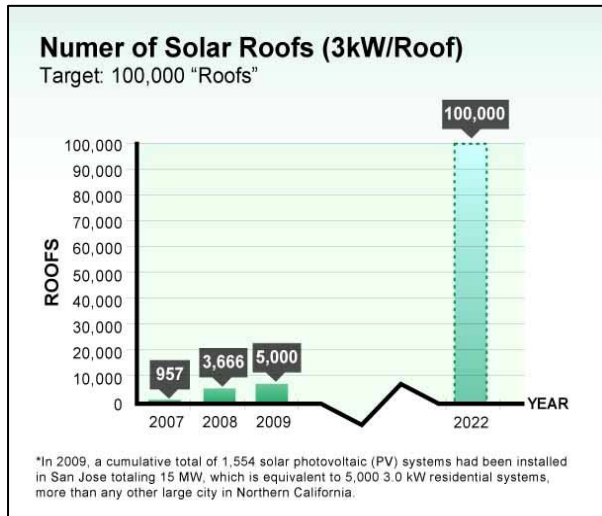
Work Plan

Strategic Focus	Proposed Strategy	2009 Work Plan	2010 Work Plan
Lead by Example			
Install Solar on City Facilities	Power Purchase Agreement RFP finalized and available for all City facility solar projects; remove barriers to solar installation for all City facilities	1.5MW on City facilities (10MW by 2010) and draft City guidance document applicable to all City facilities to expedite installations Status: Power Purchase Agreement (PPA) Request for Proposals released in Fall 2009.	Bring negotiated PPA for 1.3 MW at Central Service Yard to Council in early 2010 and install systems by Summer 2010. Develop a comprehensive strategy for the remaining MWs and bring forward to Council in Spring 2010.
Advocating Policies			
Remove regulatory barriers to widespread adoption of solar	Work with CPUC, utilities and others to establish fair, appropriate and reasonable tariffs to encourage expansion of solar	Implementation of AB2466, which allows cities to install up to 1WM of solar beyond use need on a city property and apply the excess solar to the energy needs at a different city facility. Pursue feed-in tariffs to encourage expanded installation of solar. Status: Awaiting final determination of CPUC regarding tariffs associated with AB2466	Implementation of AB2466
Financing Mechanisms			
Support solar programs for rental markets; and other innovative financing mechanisms	Work with city departments, CPUC, PG&E, and CEC to implement solar programs for multi-family and low income residents; Develop integrated financing offerings for the community	Low-income and multifamily solar installations are increased by 15% Status: PV systems were installed through collaborative efforts with Habitat for Humanity and GRID Alternatives.	Conduct outreach to low-income and multifamily property owners on the CaliforniaFIRST program.
Pursue implementation of clean energy municipal financing for the community	Participate in regional efforts and examine development of City-wide clean energy financing	Establish a model for clean energy municipal financing by December Status: City finalizing participation in the California State Communities Development Authority's pilot	Bring Resolution to Join the CaliforniaFIRST Program to Council January 2010. If approved, begin Program implementation to San José property owners by Summer 2010.

Strategic Focus	Proposed Strategy	2009 Work Plan	2010 Work Plan
		CaliforniaFIRST Program which provides financing to be paid back over twenty years on property tax bills.	
Communications and Engagement			
Expand knowledge and awareness of renewable energy program resources	Work in partnership with businesses and organizations throughout community	<p>Increase awareness of San José residents and businesses about renewable energy with the goal of a 10% increase in number of San José residents and businesses receiving renewable energy services</p> <p>Status: Participated in a number of community events including National Night Out, held educational trainings for teachers and solar oven workshops for kids at libraries; provided over 15 solar education presentations to neighborhood associations and organized and participated in symposiums and summits on numerous solar related topics. Over 1500 community members were reached.</p>	<p>Conduct Green Vision Education and Demonstration Community Tours</p> <p>Hold Solar Block Parties to promote CaliforniaFIRST</p> <p>Hold ongoing community organization solar presentations</p> <p>Participate in conferences, symposiums and summits.</p> <p>Provide education to K-12 schools</p>

Performance Metrics





The **Renewable Energy Generation Graph** 100% target is based on the assumption that by 2022, per capita energy use will be reduced by 50% from 2007 levels in accordance with Green Vision Goal *Reduce Per Capita Energy by 50%*. The target also assumes that half of the renewable energy generation will be from solar sources due to San José's climate and geography. A total of 943MW of solar energy is needed to achieve 100% renewable energy generation as shown in the graph entitled **Solar Energy in San José**.

Build or Retrofit 50 Million Square Feet of Green Buildings

The City of San José has made great strides in the past year in the area of Green Building in both the public and private sector. A Green Building Ordinance for Private Sector New Construction was adopted in July that will apply to new construction and promote Green Building design and construction practices to minimize the use and waste of energy, water and other resources.

In addition, a number of City facilities, including libraries, community centers, and City Hall, received green building certification from the US Green Building Council (USGBC). Green Buildings are instrumental in achieving the Green Vision goals related to energy, water and waste. Buildings in the United States are responsible for 39% of CO2 emissions, 40% of energy consumption, and 13% of water consumption and make up about 15% of GDP per year, making green building a source of significant economic and environmental opportunity. Greater building efficiency can meet 85% of future U.S. demand for energy, and a national commitment to green building has the potential to generate 2.5 million American jobs. Currently San José has over 2.1 million square feet of certified public and private green building space with another 15.3 million square feet of green space in design or construction.



San José City Hall - LEED-EB Platinum

Achievements & Successes:

Private Sector:

New Construction Green Building Ordinance: This ordinance, which implements the Private Sector Green Building Policy No. 6-32 became effective in September and mandates levels of LEED or GreenPoint Rated certification for certain sizes and types of construction. The ordinance requires submittal of a green building checklist for all other new construction to increase public awareness of green building practices. To date, 30 projects are subject to the policy and ordinance, 10 of which must become certified as green buildings. The remaining are required to submit a green building checklist during the development review process.

Easy Actions You Take Now

1. Insulate your attic. For rebate information go to <http://www.pge.com>
2. Get your house Green Point Rated. Go to <http://www.builditgreen.org/> for more information.

Green Building for Retrofits, Rehabilitation and Existing Buildings: San José, like many other large cities, acknowledges that the vast majority of its building stock was constructed prior to the green building movement. In order to reach this Green Vision goal; additional goals related to energy, waste, and water; and its community greenhouse gas emission reduction targets, the City must craft and put forward policies that apply to building retrofits and renovations and existing buildings in order to promote green building and the associated benefits for these projects. The State Building Code has issued voluntary standards for green buildings, some of which become mandatory in 2010. However, projects built to meet only the State Green Building Code would not meet the minimum thresholds for green building certification.

In Fall 2009, staff began researching how other cities are approaching the issue of greening the existing building stock and crafting objectives for a City Retrofits and Renovations policy. Stakeholder outreach related to policy development will begin in Winter 2010 with a policy anticipated to come forward for Council consideration in late 2010. In the context of the current economic climate, an important consideration while drafting the framework for this policy, will be the cost savings related to operational and maintenance efficiencies resulting from the greening of existing buildings. As this policy become effective, and the economy improves, staff anticipates making substantial progress on this goal.

Recent successes in the private sector include: LEED certification of the BD Biosciences building (Silver), a Cisco building on North First Street (Gold), a Citibank Building (Certified), the Fortune Data Center (Gold), and Casa Feliz Studios (Gold) by First Community Housing which boasts the first green roof in San José. Other highlights include the installation of wind turbines to reduce energy consumption at the Adobe Systems complex, where all buildings are certified at the LEED Platinum level.

Casa Feliz Studios: First Community Housing, a San José-based affordable housing developer, constructed and opened Casa Feliz Studios which was achieved LEED-NC Gold certification in 2009 and was awarded an American Institute of Architects (AIA) National Award for Top Ten Green Projects in 2009. Casa Feliz Studios provides 60 affordable, energy-efficient units with private bathrooms and kitchens. The well situated building is located close to transit. Casa Feliz was awarded the certification for various aspects of the building including:

- All residents receive a free annual Eco Pass for free bus and light rail travel within the County.
- Energy-efficiency requirements exceeded by 12%
- Energy-efficient windows and extensive use of green building materials
- Green living" roof for energy efficiency and stormwater runoff reduction.

For more information see
<http://www.casafelizapartments.org/>



Casa Feliz Studios - LEED Gold

City Facilities:

New Construction: Three City Facilities, the Camden Community Center, the Starbird Youth Center, and the Roosevelt Community Center received Leadership in Energy and Environmental Design for New Construction (LEED-NC) certification in 2009. Seventeen new City facilities are in various phases of design and construction and at least five, including the Airport North Concourse, the Environmental Services Building, and the Mayfair Community Center are anticipated to complete construction and receive certification in 2010. Of note, the Roosevelt Community Center achieved LEED Gold status and has won numerous awards over the past year including the American Public Works Association National Award for Project of the Year.



Roosevelt Community Center - LEED Gold

Existing Buildings: Buildings that alter their day to day operations to run more efficiently can achieve LEED for Existing Buildings (LEED-EB) certification whether or not they were originally designed as green buildings. In March 2009, San José once again demonstrated green building leadership when City Hall became the first municipal building in the country to be certified at the LEED-EB Platinum level. Platinum is the highest LEED designation achievable. Due to the hard work of many City employees, City Hall is approximately 93% more energy efficient than similar buildings, reduced water use by greater than 80%, and diverts over 90% of waste. Because the building runs so efficiently and uses fewer resources, the City is able to save more than \$30,000 annually in energy costs alone for City Hall. The Building Operations and Management Association (BOMA) awarded the City an Emerald Award for Innovation in honor of City Hall achieving LEED-EB Platinum.

Fortune Data Center Fortune Data Centers, which provides premium efficiency data centers, earned LEED Gold Certification from the U.S. Green Building Council (USGBC) for its San José facility. The data center is among the largest in Silicon Valley with a power capacity to serve 8 megawatts of critical load for IT infrastructure and the first LEED-CI Gold certified data center in San José. Fortune was awarded the certification for various aspects of the building including:

- An energy-efficiency level far superior to the industry average data center.
- Re-use of materials and recycling waste during the conversion of the facility to a data center.
- Diversion of approximately 96% of construction waste from landfill, meaning 1,137 tons of material were either recycled or re-used on site.
- Use of regionally sourced and recycled content within construction materials
- An education campaign with customers to demonstrate benefits of energy efficient IT operations.

The City continues to work with USGBC as the only municipal participant in the Portfolio Program pilot which will allow the City to streamline certification of its existing buildings by

standardizing operating procedures and policies across the City’s portfolio of buildings. Standardization of these energy and water efficient practices, waste reduction strategies, and practices that promote healthier indoor air quality provide operating cost savings, protect the health of building occupants, and promote the achievement of almost all Green Vision goals. As part of the pilot, the City committed to certifying at least 30 of the more than 400 existing City facilities. Facilities planning certification in 2010 include the Almaden Community Center and Library, the Alum Rock Youth Center, the Gardner Community Center and Fire Station # 1.

Strategic Direction

This year marked an extremely difficult year in the building and construction sector. The City experienced very little building and planning permit activity and staff was reduced by approximately 40% in both the Building and Planning divisions to reflect this marked drop in development activity. Lack of ability to obtain credit from the credit market, particularly for new development proposals, continues to remain an obstacle for planning and building recovery. However, 2009 did see a continued interest and surge in green building, particularly around energy efficiencies, and the ongoing operation and maintenance savings that are achieved by green buildings. When the market starts to fully recover, it is anticipated that green building will be at the forefront of the development industry.

Climate Change

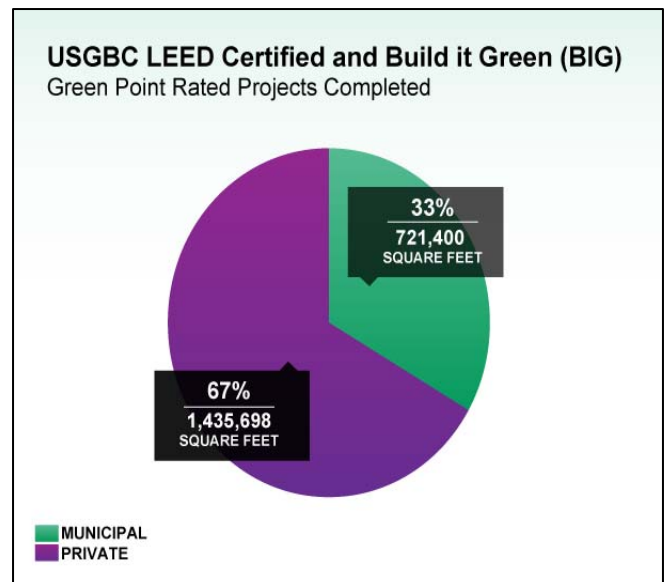
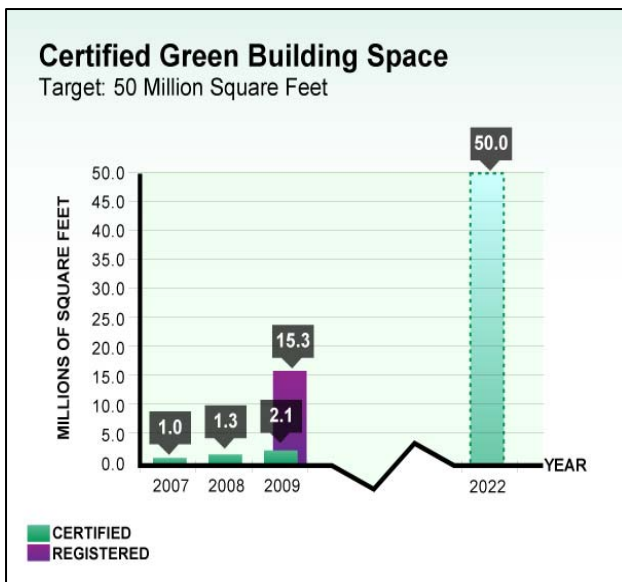
The Built Environment accounts for approximately 53% of greenhouse gas emissions in San José. Green building practices including energy and water efficiency, waste and chemical use reduction, promotion of alternative transportation, and environmentally preferable purchasing, have the potential to reduce greenhouse gas emissions significantly. The U.S. Green Building Council estimates that green buildings on average emit 33% fewer greenhouse gases than standard commercial buildings, and thus, promoting green building plays an integral role in reducing greenhouse gas emissions in San José.

Work Plan

Strategic Focus	Proposed Strategy	2009 Work Plan	2010 Work Plan
Lead by Example			
Implement Private Sector Policy for New Construction	Receive California Energy Commission (CEC) approval; develop deposit program; recommend ordinance adoption	Policy implementation effective August Status: Private Sector Green Building Policy implemented and in effect. CEC approval received for Policy implementation. Ordinance No. 28622 adopted August 4, 2009, and effective September 8, 2009 for new private-sector building permit applications. Deposit program developed.	Update Policy and Ordinance to incorporate 2010 California Green Building Code regulations and City of San Jose requirements for new buildings, retrofits, and rehabs as appropriate.
Certify existing City facilities using LEED-	Participate in USGBC Portfolio Program	Develop Portfolio Program pre-certification package for	Submit Portfolio Program pre-certification package to

Strategic Focus	Proposed Strategy	2009 Work Plan	2010 Work Plan
EB Rating System		certification of existing City facilities Status: Portfolio Program package drafted.	USGBC Prepare four City buildings for certification under LEED-EB Portfolio Program Plan for LEED-EB certification of additional City facilities
Communications & Engagement			
Develop Green Building Policy for Renovations and Retrofits	Target green building policy outreach for renovations and retrofits with a focus on environmental and economic benefits	Develop draft objectives and framework for policy by Summer, begin outreach efforts Fall Status: Draft objectives drafted Fall 2009. Additional research and outreach is required to develop an appropriate approach given the severe economic downturn.	Conduct additional research and outreach in Spring 2010. Develop policy for Council approval Fall 2010.
Promote green building for private sector new construction through staff interactions with the public	Develop outreach materials to support Private Sector Green Building Policy for New Construction and showcase municipal facilities	Develop outreach material through City wide team. Status: Draft materials developed and outreach with City staff initiated.	Test materials through counter staff activity Finalize outreach materials after receiving feedback from counter staff testing.

Performance Metrics



Divert 100% of Waste from Landfill and Convert Waste to Energy

San José boasts one of the highest diversion rates in the country for apartments and City operations at about 80%. Although the City has achieved one of the highest waste diversion rates of any large city in the nation at 66%, in the single-family residential and commercial arena, many waste reduction opportunities remain. Staff is focusing its efforts to significantly reduce waste streams evaluating the feasibility for new technologies to process waste and convert difficult to recycle waste into energy.



The Zero Waste Strategic Plan, approved by Council in December 2008, serves as the City's roadmap to achieve Green Vision Goal 5. The Plan is a dynamic document and captures the best information available on waste generation, solid waste facilities, waste processing technologies, and approaches for increased diversion, including consideration of a food waste digestion pilot at the Water Pollution Control Plant. New technologies continue to evolve and staff will amend and update the Plan to reflect relevant and best information and technologies available. The Plan and special topic appendices can be found at <http://www.sjrecycles.org/zerowaste.asp>

Achievements & Successes:

Waste to Energy: Once the readily recyclable or compostable materials have been removed from the waste stream, the material remaining becomes harder to collect and process, creating the need to consider innovative technical solutions. One such solution is converting waste to energy, which reduces the volume of material and prepares it for further processing while capturing energy in the process.

Because San José is committed to highest and best use of waste resources, staff is investigating programming that can return organic materials back into the growing systems that produced them, thereby creating a truly renewable energy resource. As a result, San José's strategic efforts have focused primarily on organics to energy technologies that result in soil amendment products in addition to methane for energy. In addition to resource hierarchy, the conversion of inorganic material

Easy Actions You Can Take Now

1. Take reusable shopping bags with you when you shop to reduce the number of single use bags that end up in the landfill.
2. Attend one of the City's residential home composting workshops and begin composting at home. This will reduce waste going to landfill, and your yard and plants will flourish. For more information on classes visit http://www.sjrecycles.org/residents/home_compost.asp
3. Minimize purchasing single-use plastic containers; for example, avoid individual plastic water bottles and use a refillable and reusable sports bottle instead.

through certain technologies, such as incineration would require significant additional analysis to determine feasibility and stakeholder acceptance for San José. Staff developed an Organics to Energy Strategic Plan in summer 2009 as a strategic roadmap for pursuing energy conversion technologies.

The Organics to Energy Strategic Plan includes the following strategies for phased implementation of waste to energy technology:

Energy Conversion Option in the Commercial Solid Waste Redesign Request for Proposals (RFP) Process- The option for energy conversion as part of the Commercial Solid Waste Redesign RFP could facilitate implementation of a renewable energy system that utilizes the waste streams collected through the new exclusive solid waste and recycling collection contracts currently under development for the business sector in San José. Giving proposers the opportunity to present processing options linked to collection provides the private sector an opportunity to identify and invest in the best technologies available for San José-specific logistics and waste feedstocks. This alternative proposal option would facilitate energy technology development that would be integrated into city-wide commercial waste operations if appropriate and cost effective.

Develop a Conversion Technology Research and Incubation Center – A demonstration center could cluster new technologies such as Dry Fermentation, or focus on technologies not yet developed to commercial scale or that require additional evaluation from stakeholders including the local community and regulatory agencies such as the Bay Area Air Quality Management District. Staff is working through the Water Pollution Control Plant Master Planning Process to investigate using a portion of Plant land for the development of a research and incubation center for emerging technologies. Staff is also evaluating collaborating with research and educational institutions in the area such as UC Davis, Stanford, San José State University, and UC Santa Cruz to leverage research experience and expertise in technology analysis, as well as the potential for available research grants.

Bay Friendly Gardening and Landscaping program: San José has been instrumental in bringing the regional Bay Friendly Gardening and Landscaping program to Santa Clara County. This sustainable landscaping curriculum offers an approach to gardening and landscaping that integrates key garden and landscape principles including: building healthy soil, reducing waste, conserving water, creating wildlife habitat, protecting watersheds, contributing to a healthy community, and saving energy. These practices can help San José meet its Green Vision goals by increasing compost use, reducing pesticide use, conserving energy and preserving water quality. Newly introduced classes were attended by more than 150 County residents in 2008-2009, with more classes to be offered in the upcoming year.



Investigate Gasification – Staff plan to work with leading engineering consultants HDR and URS to evaluate the feasibility of a gasification plant in San José, considering available technology, local permitting and public perception barriers. The City is also closely monitoring the energy technology evaluation processes of both Los Angeles City and County, who are undergoing major RFP processes to obtain conversion technology. Staff analysis includes site

assessments, and a nationwide survey to identify municipal process for obtaining conversion technology, and lessons learned which can be applied to San José.

Align Opportunities at the Plant - As part of the Water Pollution Control Plant Master Planning Effort, staff is evaluating leveraging plant infrastructure and available onsite resources to bring organics to energy opportunities to the City including potential conversion of the following feedstocks: fats, oils, and grease; food waste; and biosolids.

A significant step in converting organic waste to energy occurred in June 2009, when Council authorized staff to enter into negotiations to lease 40-acres of San José/Santa Clara Water Pollution Control Plant Lands to the Zero Waste Energy Development Company to develop and operate a dry fermentation anaerobic digestion facility. The facility could eventually process up to 150,000 tons of organic waste per year and would be the first such facility in the United States.

San José hosted a day-long workshop in November 2009 that brought together leading technology providers for one type of conversion technology, anaerobic digestion, with garbage haulers, the California Integrated Waste Management Board, regulators, and other local governments. Approximately 200 attendees learned how to further waste to energy systems and how to develop partnerships between haulers, municipalities, and technologists to bring these systems to the Bay Area. In addition to further training for staff, this was a valuable opportunity for technology vendors and local haulers to connect on potential projects for San José.

Commercial Solid Waste System Redesign:

The current commercial solid waste program can be improved upon to maximize diversion of recyclable and compostable materials. In order to better align this program with the Zero Waste Goal, staff completed an evaluation of proposed collection districts, finalized categories of materials to be included in a new system, and plans to release a Request for Proposals (RFP) in early 2010 with full implementation to occur in 2012. It is anticipated that the redesigned commercial system will increase



the commercial solid waste diversion rate from under 20% to over 75%, generate green collar jobs, provide feedstock for potential waste to energy operations, and decrease the greenhouse gas impact of the current system by providing more efficient routing and an updated vehicle fleet. This redesign effort will position the City to meet and exceed the expected requirements of AB 32, the California Global Warming Solutions Act of 2006.

City Facilities, Events and Venues Recycling: The Special Events and Venues Recycling program provides garbage and recycling services for special events and major venues in San José, aimed at achieving zero waste and incorporating sustainability. The program supports venues such as the San José Convention Center, Children’s Discovery Museum, and Tech Museum. This program also supports garbage and recycling services for approximately 30 large scale community events such as the Jazz Festival, Italian-American Family Fiesta and Tapestry

Arts Festival by reducing waste at these events up to 97%. Support for the five largest events includes extensive on-site management and sorting of waste, product replacement with compostable or recyclable materials, and community education. San José provides more recycling services to Special Events, through its partnership with San José Conservation Corps, than any other municipality in California. The Special Events Program was presented with the 2009 California Resource Recovery Association's "Working Towards Zero Waste" Award, and the 2009 Governor's Environmental and Economic Leadership Award for Waste Reduction.

In addition to the high diversion rates achieved at City events, the City Facilities Garbage and Recycling program provides garbage and recycling service to all 140 City facilities including parks, libraries, community centers, the Airport and City Hall. Recyclables are manually and mechanically removed from the waste stream. The left-over residues, including food waste and soiled paper, are then delivered to a local composting facility for the five month composting process resulting in an 82% recycling rate, the highest of any City program in the nation.

Construction & Demolition Recycling Evaluation: Construction and demolition (C&D) waste plays a significant role in achieving both the Zero Waste Goals and the Green Vision Goals through providing a renewable energy source for waste to energy projects and providing reusable materials for Green Building construction activities. Currently, construction and demolition represents approximately 30% of the City's overall disposal. To address this waste stream, San José's Construction Demolition Diversion Deposit Program (CDDD) was created in 2001. San José's CDDD program was the first of its kind in the nation. Numerous cities around the country, including New York City, have used this program as a model for developing their own C&D programs. In November 2009, a thorough evaluation and analysis of the City's CDDD Program was completed. Some of the objectives were to achieve greater diversion levels, support waste to energy, and to align diversion requirements with Green Building LEED requirements. The program enhancements encourage facility operators to improve and expand processing capabilities and increase diversion. The new requirements phase in a 75% diversion standard, as well as minimum processing capabilities specific to each facility type.

Residential Recycling: San José has the highest-performing multi-family recycling program in the United States. The program, which separates and sorts recyclable and compostable materials from trash in an off-site facility, was introduced in 2008 and created more than 70 new jobs in San José. The program's success continued in 2009 and diversion rates increased to over 80% from 75% in 2008. Prior to implementing the new sorting method apartment recycling rate was only 35%



Residential yard waste, recycling and waste containers

For single-family households, staff is implementing organic waste collection and recycling pilots in 2009-2010 with approximately 16,500 households participating. Organic waste is the single largest component of residential garbage. These pilots include the Yard Trimmings Cart Pilot, the Garbage Processing Pilot, and the Food Scraps and Organics Pilot. The Garbage Processing Pilot involves only back-end processing to recover

recyclable material from garbage collected from single-family residences. The Food Scraps and Organics Pilot has residents depositing bagged food scraps into a yard trimmings cart. Staff is currently preparing a comprehensive public outreach plan and will incorporate lessons learned from the Yard Trimmings Cart Pilot implemented in November 2009 to ease the transition for the Food and Scraps and Organics Pilot participants. Rollout of the Food Scraps and Organics Pilot is anticipated March 2010 in selected neighborhoods in Council Districts 1, 2, 4, 5, and 8.

The provisions in the current Recycle Plus agreements limit each pilot to a term of no more than 18 months. Therefore, pilots rolling out in November 2009 will run through April 2011. The Organics Cart Pilot, anticipated to start March 2010, will also run for a period of 18 months through August 2011. Information obtained from these pilots will shape the development of the Request for Proposals for the next set of Recycle Plus service contracts. The current Recycle Plus contracts will expire in 2013, absent an extension.

Las Plumas Environmental Innovation Center:

The City finalized design concepts in 2009 for the renovation of a warehouse on Las Plumas Avenue into the Environmental Innovation Center (EIC). The EIC is envisioned to be a state of the art facility that advances the City's commitment to San José's Green Vision through Clean Technology innovation and job creation by providing a premier environmental showcase and development center for cutting-edge technologies that support the City's Green Vision.

This facility will house four distinct environmental programs: Clean Technology Development Center, a building material Re-Use Store, open office, conference room and public space for environmental programs and training, and a household hazardous waste (HHW) drop off operation. Two phases of Construction are planned, with the first phase including grading, street strengthening and storm water pollution prevention system will be completed in spring 2010. Phase Two construction including the majority of enhancements to the existing building would begin in August 2010 and be completed in February 2012. Phase Two construction, including the majority of enhancements to the existing building would begin in August 2010 and be completed in February 2012. Currently, Phase Two is partially funded and grant funding is being actively pursued for the remainder of the project. If full funding does not become available, the project schedule may be delayed. This combination of activities will promote environmental innovation, create jobs and provide a local resource for residents and businesses. Additionally, the facility is being designed to meet LEED Platinum criteria and will feature a number of innovative and sustainable designs.

Residential Home Composting

Program: San José's Home Composting Program partners with the Santa Clara County Home Composting Education Program to promote backyard composting through education and subsidized compost bin sales. The composting classes have consistently sold out with up to 100 residents attending per month; demonstrating that interest in composting continues to increase. Starting in 2009, San José and Santa Clara County began offering Bay Friendly Gardening classes for residents as a way to present integrated information on sustainable landscaping and gardening. San José will be able to present classes on: Bay Friendly Gardening basics, Soil Management and Composting, Natural Pest Management, and Worm Composting Legislation.

Strategic Direction

Strategic efforts in 2010 will focus on addressing AB32 Climate Change goals by removing organics from the waste stream, which represents approximately 30% of the disposed waste by weight in San Jose. To this end, staff has already begun residential food waste and yard trimming collection pilots and is preparing to issue an RFP for organics process as part of the redesign for the commercial garbage and recycling program. Lastly, staff is pursuing grants, and other sources of funds, that target organics as a feedstock for biomethane generation and aligning these opportunities with the Water Pollution Control Plant operations and master planning process.

Climate Change

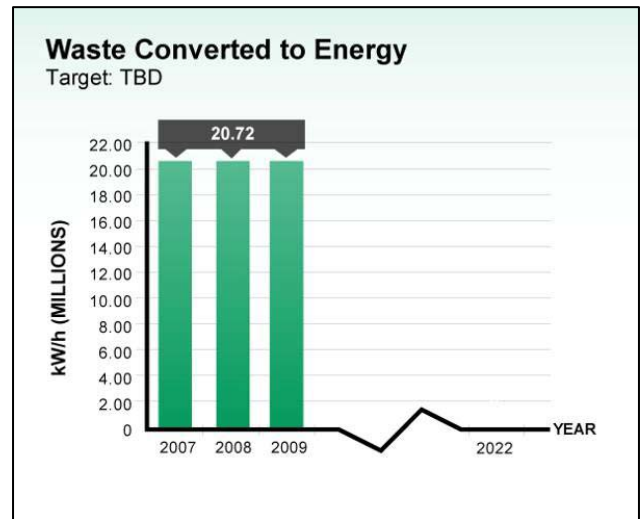
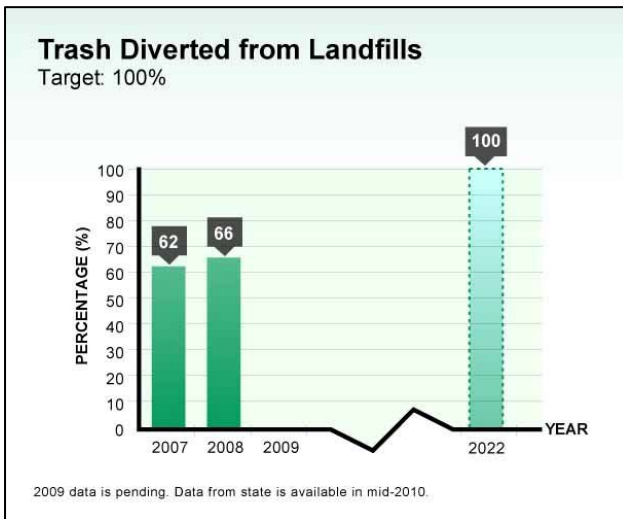
In baseline year 2006, approximately 750,000 tons of waste was trucked to the landfill translating into approximately 259,000 metric tons of CO₂. Waste accounts for about 7% of greenhouse gas emissions in San José. Emissions are primarily released through transportation of waste, and releases from landfill sites as waste degrades. By 2022, San José’s reduction and recycling efforts will reduce landfill waste to 45,000 tons with a corresponding reduction of emissions to 13,500 metric tons of CO₂. This amount represents a 95% reduction of waste to landfill and carbon emissions and takes into consideration the projected population growth expected in San José by that time. Through the pursuit of zero waste in the City, and converting waste-to-energy, this aggressive goal can be achieved by further maximizing recycling and composting in both residential and commercial arenas, continuing to divert over 95% of waste at events, and moving towards selection and implementation of a local waste-to-energy technology.

Work Plan

Strategic Focus	Proposed Strategy	2009 Work Pan	2010Work Plan
Lead by Example			
Advance Commercial Redesign	Negotiate contracts that comply with City policy and provide cost-efficient services; identify sites for infrastructure	Design new commercial solid waste system; initiate procurement process for selecting new commercial haulers/recyclers. Status: Request for Proposals for Commercial Organics processing being developed.	Conduct a procurement process for a new commercial solid waste system, including organics processing, select a service provider(s), and bring award recommendations to Council for consideration
Streamline Construction Demolition Diversion Deposit (CDDD) program	Develop new program/reporting requirements for C&D facilities	Improve CDDD program to increase waste diversion and streamline processes Status: Proposed program and administrative modifications presented to T&E Committee in December 2009.	Implementation of CDDD proposed modifications.
Eliminate litter to achieve Zero Waste	Reduce use of disposable, single use items that contribute to litter, including single-use	Develop policies and programs to reduce litter Status: Council directed staff to develop an ordinance for	Develop policies and programs to reduce litter Submit EIR to Council for finalization and ordinance to

Strategic Focus	Proposed Strategy	2009 Work Pan	2010 Work Plan
	carryout bags, water bottles, and polystyrene takeout food packaging.	<p>consideration to reduce single use carryout bags</p> <p>Staff initiated an EIR processes and a comprehensive stakeholder review process for crafting the ordinance.</p> <p>Council adopted a policy banning the use of Styrofoam takeout food containers at special events on City property.</p>	<p>Council for adoption in Spring 2010</p> <p>Initiate transition to support new ordinance</p> <p>Implement Bring Your Own Bag Campaign</p>
Strategic Partnerships			
Develop waste to energy technology infrastructure at the City's WPCP	Collaborating with regional and state public partners as well as private planners and investors will provide the most efficient solution for waste diversion and energy production	<p>Initiate process for procuring Waste to Energy (WTE) capacity on WPCP owned lands</p> <p>Status: Site feasibility and environmental assessment underway</p>	<p>Finalize site feasibility assessment</p> <p>Complete Environmental Review and permitting process</p> <p>Conclude lease negotiations</p>

Performance Metrics



Recycle or Beneficially Reuse 100% of our Wastewater

Wastewater in San José is treated at the state-of-the-art Water Pollution Control Treatment Plant (Plant). One of the largest advanced wastewater treatment facilities in California, the Plant is located at the southern tip of the San Francisco Bay in north San José, close to the small San José community of Alviso. It is a regional facility, providing wastewater treatment for over 1.4 million residents in a 300 square mile service area covering most of the Santa Clara Valley. The Plant is jointly owned by the City of San José (75%) and the City of Santa Clara (25%), receiving and treating wastewater from six other tributary agencies and sanitary districts. Approximately 115 million gallons per day (mgd) of wastewater flows into the Plant, which has been in “round-the-clock” operation since it was first commissioned in 1956. The Plant’s multi-stage treatment process is comprised of preliminary treatment (screening and grit removal); primary sedimentation; biological treatment (nutrient removal with activated sludge followed by gravity clarification); dual-media filtration; and disinfection (including both chlorination and dechlorination with sulfur dioxide).



Clean, treated water is piped to southern San Francisco Bay via the Alviso slough. Maintaining the delicate balance of freshwater flows from the Plant to the South Bay salt marsh environment requires constant monitoring to ensure the flows are beneficial to the species that inhabit the Bay and surrounding salt water marshes, including the endangered salt water harvest mouse and the clapper rail.

In 1998 the City began operating a system of pipes, pumps and reservoirs designed to distribute drought-proof recycled water to customers in Santa Clara County. Recycling wastewater not only helps protect the salt marsh in the lower South Bay by ensuring the amount of freshwater does not delete the salinity in the marshes to an unacceptable level, but it also protects limited water resources by using recycled water in place of potable water for appropriate uses such as irrigation and industrial processes. Currently, an average of 11 million gallons of recycled water per day is sent through more than 100 miles of pipeline to nearly 600 customers in San José, Santa Clara and Milpitas. The City plans to increase recycled water

Easy Actions You Can Take Now

1. Educate yourself and your family about the benefits of recycled water. For more information go to: <http://www.sanjoseca.gov/sbwr/>
 2. Don't leave the water running. Turn off the tap while washing dishes. Fill the sink to wash and rinse dishes.
 3. Water your lawn only when it needs it. Over watering the lawn is a common wasteful practice. Step on your lawn. If the grass springs back up when you remove pressure, it doesn't need watering.
- For more information go to <http://www.sanjoseca.gov/esd/water-conservation/residents/resident-actions.asp>

use up to a total of 40 mgd by 2022.

Achievements & Successes: In order to achieve the long-term target of 100% beneficial reuse by 2022, in 2009 South Bay Water Recycling initiated a \$15 million pipeline expansion program. Funded in part by stimulus grants provided through the American Recovery and Reinvestment Act (ARRA), the program will add 10 miles of pipe to the existing distribution system and serve an additional 2 mgd to customers in San José and Santa Clara. In addition, to support the Goal 6 target, staff embarked on an ambitious Water Pollution Control Plan Master Plan to consistently provide high-quality recycled water use for local irrigation and industrial reuse, and perhaps even eventually for use in augmenting groundwater supplies.

Plant Master Plan: In addition to planning the development and preservation of the 1700 acres surrounding the Plant's 160-acre industrial campus, the Plant Master Plan effort, initiated in 2008, will ensure the production of effluent that meets all health and regulatory standards appropriate for recycled water. These plans include coordination with the Santa Clara Valley Water District (see below) on the design, construction and future operation of an Advanced Recycled Water Treatment Facility (ARWTF) that will provide membrane filtration to further improve the quality of recycled water from the Plant. The City has proposed to contribute up to \$11 million towards construction of that facility.



The Water Pollution Control Plant

Grants Received: The City has been awarded a \$6.46 million dollar grant from the Bureau of Reclamation to expand the recycled water system. The first phase of projects funded in part by Recovery Act grants provide for the construction of up to 10 miles of recycled water pipeline and related facility improvements that will increase the amount of recycled water distributed by the SBWRP by up to 2000 acre-feet per year (AFY). Pipeline extensions are planned for downtown San José as well as industrial areas in Santa Clara. Project construction is expected to start in early 2010. In addition, the Santa Clara Valley Water District has received an offer to receive a stimulus grant of \$8.5 million towards construction of the \$52 million ARWTF. Additionally, a total of \$55 million, of which \$31 million has already been received, is being provided as a Federal Match for the Recycled Water system.



Efforts to Increase Nonpotable Demand for Recycled Water: Significant efforts to increase recycled water use include the following projects:

Dual Use Plumbing Ordinance: An ordinance to require the use of recycled water in non-residential buildings was developed in 2009 and discussed with developers, building owners and other community stakeholders. The proposed ordinance would require the installation of a

separate recycled water system (“dual plumbing system”) in all new non-residential buildings 5,000 square feet in area or larger located within one-half mile of the SBWR pipeline alignment (existing or planned), and would mandate their use of recycled water when available. The proposed ordinance would also require dual plumbing systems to be installed in all new non-residential buildings in San José greater than 50,000 square feet regardless of their proximity to the recycled water system. City staff are continuing to discuss details of the proposed ordinance with interested stakeholders, and expect to bring a recommendation to Council for consideration in 2010.



Interior “purple pipe” dual plumbing

Data Centers and Cooling Towers: Two new cooling towers were connected to the recycled water system in 2009 (Lifescan in Milpitas and the County Crime Lab in San José), and staff completed the “SBWR Cooling Tower Guidelines,” a important technical information on the use of recycled water in cooling towers serving industrial and commercial facilities. With the help of additional marketing material, the SBWR Cooling Tower Initiative is designed to serve an additional 2-3 mgd of recycled water to new cooling tower customers with a goal of connecting 1 mgd during the current calendar year.

Partnership with Santa Clara Valley Water District: City and District staff met weekly during 2009 to negotiate a recycled water partnership agreement. On December 9, 2009 the Recycled Water Liaison Committee accepted the framework of the agreement and recommended approval by Council and Board which is now scheduled for March 2010.

Legislation

As noted above, San José is an authorized recipient of federal funds to construct recycled water facilities through the US Bureau of Reclamation’s Title XVI program. A proposed follow-up to the 2009 American Recovery and Reinvestment Act (\$126 million for recycled water projects), includes an additional \$26 million for reuse in the 17 western states. In addition, the City is authorized to receive up to \$23 million through the annual federal appropriations process.

Strategic Direction

In order to meet the Green Vision goal for recycled water during the coming year staff will highlight the value of recycled water to customers and the general public, and propose a

San José State University

Since 1999 San José State University has been using recycled water to cool their Central Plant that generates electricity and provides steam heat and chilled water for approximately five million square feet of university building space. This use offsets approximately 40 million gallons of potable water per year (the water used by 300 households), including 50,000 gallons per day used for cooling and an equal amount for landscape irrigation. San José State University plans to increase their use of recycled water by over 50% by completing the installation of a dual plumbing system in the Martin Luther King Jr. Library, connecting the Central Plant boiler feed to the SBWR system and irrigating the remainder of their on-campus landscape with recycled water.

City ordinance to require its use in new buildings in San Jose. In addition, a Cooling Tower Initiative will market more than 100 potential customers near the SBWR pipeline in order to increase recycled water use by as much as 1 million gallons per day.

Climate Change

The recycled water system in San José currently emits approximately 664 metric tons (MT) of CO₂ each year to process about 10 MGD of recycled water per day. This goal also considers reducing potable water use through water conservation measures. Transporting, treating, and distributing potable water in San José in 2007 accounted for approximately 1,020,434 MT (1.02 MMT) of emissions. By increasing recycled water use, and reducing potable water use, combined with the shift to renewable energy generation, emissions in 2022 are projected at 247,246 metric tons.

Guadalupe Community Gardens

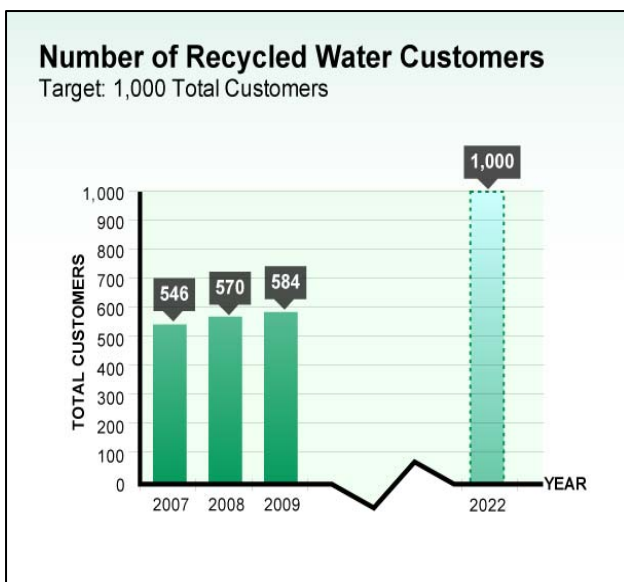
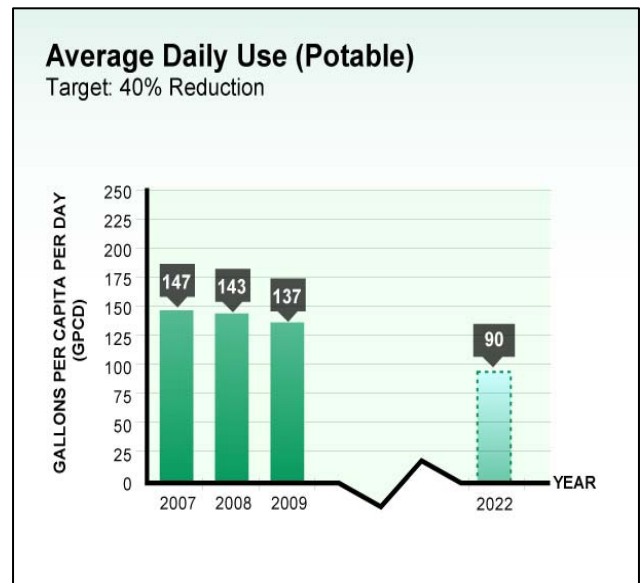
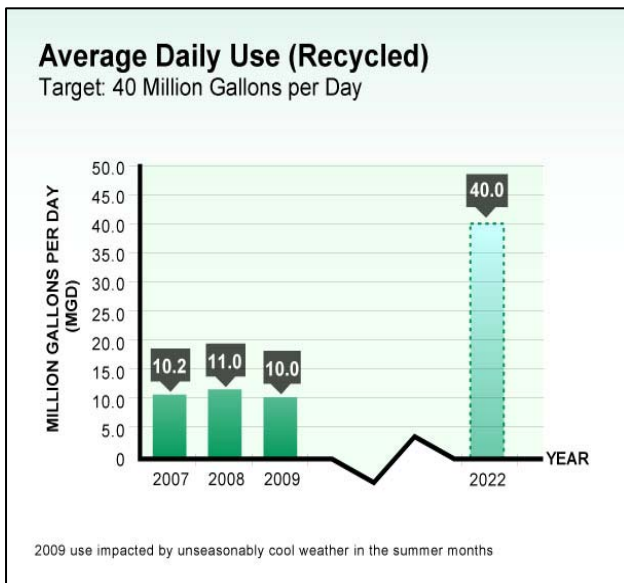
A little over one year ago, in November 2008 the Friends of Guadalupe River Park opened the first community-managed garden in California to use recycled water for irrigation of garden vegetables cultivated for personal use. The garden's design includes 33 elevated beds irrigated with recycled water, including four beds especially built for handicap accessibility. The community garden and its pioneering use of recycled water for irrigation of vegetable crops illustrates the role of Guadalupe River Park & Gardens as an "outdoor classroom" where adults and children can learn about horticulture, environmental stewardship, and the region's agricultural heritage. In August 2009, at the official Dedication Celebration, gardeners displayed their bounty from the first complete growing season including fruits, vegetables, flowers and herbs all irrigated with recycled water. The use of recycled water at the GRPG Community Garden is consistent with San Jose's Green Vision goal "to recycle or beneficially reuse 100 percent of our wastewater, or 100 million gallons per day." Plans to double the size of the garden, which has a waiting list, will be accelerated by the investment of stimulus funds scheduled to be awarded by the US Bureau of Reclamation in early 2010.

Work Plan

Strategic Focus	Proposed Strategy	2009 Work Plan	2010 Work Plan
Lead by Example			
Expand uses of Recycled Water	Re-evaluate and expand criteria for new developments in the vicinity of SBWR pipeline alignments	Adoption of an ordinance for new development Status: Proposed ordinance developed and presented to Transportation and Environment Committee in September 2009. Outreach ongoing.	Continue to work with development industry to craft an appropriate ordinance.
Financing Mechanisms			
Finance expanded recycled water infrastructure	Development fee to support recycle water	Recommend Development Fee for Council Approval by June Status: On hold due to decline in development	Pursue grant funding and partnerships.

Strategic Focus	Proposed Strategy	2009 Work Plan	2010 Work Plan
		activity.	
Strategic Partnerships			
Execute an agreement with the Santa Clara Valley Water District for long-term development of recycled water use	Develop and analyze alternative modes of collaboration; facilitate meetings with elected officials to review and approve selected alternatives	Enter into a long-term agreement to expand uses of recycled water Status: Negotiated agreement framework.	Council and Water Board approval of long-term recycled water agreement framework in Spring 2010.

Performance Metrics



Adopt a General Plan with Measurable Standards for Sustainable Development

The General Plan is the City's primary policy document to guide San José's future growth and development and the day to day provision of services to its residents. The General Plan guides the City's decision making process for the development of all other new policies and initiatives. It is important to periodically perform a comprehensive update of the General Plan to better align the Plan with evolving community values and to clearly articulate a vision for the City that is relevant and appropriate for the present day context. San José is currently midway through the process of a comprehensive General Plan Update, the last such comprehensive update having been completed in 1994. In August, 2007, the City Council appointed the Envision San José Task Force, composed of community, business, and labor leaders, to guide the General Plan Update process. Through the Envision process, the Task Force and the broader community have articulated strong support for enhancing the importance of environmental stewardship in the City's General Plan. The Draft Vision Environmental Leadership goal for the General Plan Update states that "San José is a model of an environmentally sustainable and healthy city, a leader in green technology and a vigilant steward of its resources for present and future generations."

Consistent with the Draft Vision for Environmental Leadership, the Update process is developing an environmentally progressive set of General Plan policies for City services that reinforce and advance other Green Vision goals, such as those for Water Supply, Zero Waste, use of Green Building techniques and growth of Clean Technology jobs. These policies



Envision 2040 community planning exercise meeting

Easy Actions You Can Take Now

1. Participate in the Envision General Plan Update process. Community members can participate in the formulation of the City's General Plan policies, including the development of measurable standards for the achievement of environmental objectives, by attending Task Force meetings and workshops, or by providing input directly to Planning staff. Information on how to participate is available on the Envision website at http://www.sanJoseca.gov/planning/gp_update/default.asp.
2. Provide comments and suggestions on the proposed General Plan Goals, Policies, and Implementation Actions, including the proposed measurable standards for sustainable development.
3. Embrace the personal benefits of walking, bicycling, and using transit for day-to-day activities and consider their key role in the quality of life in a sustainable City.

are paired with a proposed land use plan that accommodates demand for new job and housing growth in a manner intended to minimize environmental impacts. The Task Force has extensively discussed the use of a “Corridors, and Villages” strategy that directs new growth to occur in areas of the City with close proximity to transit facilities and other existing infrastructure. This strategy is also a means of utilizing targeted infill development sites to distribute new development including household-serving commercial uses, throughout the City in proximity to existing and future residents. Building on the Vision goal for an Interconnected City, the Task Force has discussed the importance of multi-modal transportation corridors linking a vibrant Downtown, high-intensity hubs, and local-serving neighborhood villages.

Achievements & Successes: The General Plan Update is anticipated to be completed in 2011. A key component of the entire General Plan Update process is meaningful community and stakeholder engagement in the development of the Plan.

Land Use Study Scenario Selection: On June 16, 2009 the City Council accepted the Task Force and staff recommendations on where to locate jobs and housing growth capacity in the four Land Use Study Scenarios. Each of the four scenarios proposes a different geographic distribution of job and housing growth capacity. Through the process, the Task Force and members of the community have strongly advocated for land use planning that is environmentally sustainable, fiscally responsible, and makes prudent use of existing transit facilities and other infrastructure. In deciding where to locate new job and housing growth capacity for each scenario, goals such as developing walkable neighborhood villages and vibrant urban locations at strategic locations throughout the City, informed the process. Growth was not recommended in the Coyote Valley Urban Reserve and the South Almaden Valley Urban Reserves nor was housing growth



Community members completing a mapping exercise showing where future growth should be directed

recommended in the Evergreen Campus Industrial properties because growth in these areas is anticipated to result in greater negative environmental implications, and negative fiscal impacts than in-fill development and would not improve the vibrancy of San José. The report can be viewed online on the June 16 Council Agenda Item 4.3 at <http://www.sanjoseca.gov/clerk/Agenda/20090616/20090616a.pdf>

Policy Formation and Plan Development – Incorporation of Measurable Standards for Sustainable Development within the General Plan: The Envision Task Force, meeting at least monthly since July, has developed draft Goals, Policies and Implementation Actions related to parks, recreation and open space, water supply, riparian corridors and water quality, recycling and zero waste, energy supply and conservation, green building, healthy neighborhoods, natural communities and wildlife habitats, the community forest, and clean technology. Further policy development and discussion is planned for 2010, included draft policies related to economic development, fiscal sustainability and transportation. These draft

policies, along with the selection of a preferred Land Use scenario in 2010, will allow the General Plan to advance the Envision goal for Environmental Leadership. Final policy recommendations in all these critical areas will be brought forth for Task Force and City Council review of the complete Draft Plan document in June 2010, with City Council consideration of a final draft General Plan anticipated to take place in June 2011, following completion of the environmental review process.

Wikiplanning: With support from The Knight Foundation, staff created an online “wikiplanning” site which enabled San José community members to provide input into the Envision process that will help shape the future of San José over the next 30 years, without attending a community meeting in person. Even with open government and consistent community engagement efforts, significant challenges exist for some residents to attend evening and weekend meetings, the traditional method of civic engagement. Wikiplanning allowed community members to address and provide input on the issues also being discussed at traditional public meetings, from their own homes, workplaces, or anyplace with an internet connection at any time throughout the day or night. A much larger and more diverse mix of residents was thus able to provide input into the Envision process. Participants used an array of activities available on the www.wikiplanning.org website including message boards, a survey and a visual preference survey. The latter allowed participants to post photographs of things they considered desirable or undesirable for San José and share comments on those photographs. The site recorded approximately 4,500 logins while it was active between August 1st and November 15th, 2009.



Legislation:

City staff will continue to monitor and participate in the review process of State legislation that supports the implementation of the City’s vision for a sustainable San José. Such legislation includes, but is not limited to, bills pertaining to greenhouse gas emissions, transportation, parks, affordable housing, and other similar topics related to land use planning and environmental sustainability.

Envision Task Force Members and the Community: San José community members are making a significant contribution to the achievement of this goal through participation in the General Plan Update process. Community member participation includes the leadership provided by the Envision Task Force, the several hundred community members that have participated in regular Task Force meetings or the community workshop, and the several thousand community members that provided input through the Wikiplanning website engagement effort.

Strategic Direction

Based on the Envision General Plan Update effort schedule, San José is anticipated to adopt a new General Plan in June of 2011. Following adoption of the updated General Plan, the City

will need to conduct regular analysis and reporting for the measurable standards included within the General Plan as part of the annual General Plan review process. Because of the long-term timeframe for the General Plan (2040), it will likely be necessary to update specific components of the General Plan, such as the measurable standards, on a periodic basis as new technologies become available or the environmental context changes in some manner.

Climate Change

In 2007, San José emitted a total of 4,320,000 metric tons (4.32MMT) of greenhouse gas emissions. By 2022, achievement of Green Vision goals will reduce emissions, excluding transportation, to approximately 2,460,564 MT (2.46 MMT). San José has a notably low rate of emissions per capita amongst large American cities. This low rate can be attributed in large part to the moderate climate and associated reduced heating and cooling energy needs.

Non-profit Organizations: Non-profit organizations, including the Silicon Valley Leadership Group, Chamber of Commerce, Greenbelt Alliance, Open Space Authority, and Working Partnerships are taking an active role in the General Plan Update process, contributing toward the development of meaningful, sustainable measures to be incorporated into the General Plan.

The Climate Action Plan, which is being developed in tandem with the General Plan Update process, will put forth a road map to reduce greenhouse gas emissions that includes transportation emissions. Transportation-related greenhouse gas emissions can be reduced for San José by developing a more compact urban form that facilitates trips to work, school, and commercial areas by walking, mass transit or bicycling.

Work Plan

Strategic Focus	Proposed Strategy	2009 Work Plan	2010 Work Plan
Communications & Engagement			
Develop meaningful performance measures	Focused civic engagement with Task Force and community to identify specific performance measures	Submit Land Use and Transportation scenarios to Council in April. Draft General Plan measures to be completed by late 2009 Status: Land Use scenarios submitted.	Complete Draft Goals, Policies, and Implementation Strategies for all General Plan topics, including measurable standards for sustainable development. Select preferred Land Use Scenario.

Performance Metrics: As noted above, Performance Metrics are being developed as part of the draft General Plan policies. As policies are crafted, relevant Performance Metrics are discussed and will be refined once all policy areas discussions are completed. For example, possible transportation related Performance Metrics being discussed by the Envision Task Force include vehicle miles traveled (VMT) and the modal split for commute trips.

Ensure 100% of Public Fleet Vehicles Run on Alternative Fuel

1,042 of the City's vehicle fleet, or 41%, currently run on some form of alternative fuel: compressed natural gas (CNG), B20 biodiesel blend, electric, hybrid gas/electric, liquid propane gas (LPG), and bi-fuel (unleaded gas and CNG). This Green Vision goal helps to drive and stimulate the local market for alternative fuels, and emerging alternatively fueled vehicle technologies and products. All City departments have some type of alternative fuel vehicle in their vehicle complement, be it front-line fire fighting apparatus that runs on B20 biodiesel, to liquid propane gas fueled forklifts at several of the City service yards, or all electric service vehicles supporting operations at the Water Pollution Control Plant.



City's first Bio-diesel / Hybrid-electric fueled dump truck

Achievements & Successes:

Optimize Fleet Size: In compliance with the City's Green Fleet Policy, the fleet size continues to be optimized and reduced whenever possible. This year, the fleet size reduction was 1.5%. In keeping with the Green Fleet Policy, whenever new vehicles are purchased, more fuel efficient vehicles are considered to replace existing inventory as long as the replacement can function within the departments program service delivery requirements. Until recently, the automotive industry has provided very limited options for fuel-efficient and alternative fuel vehicles in the medium- and heavy-duty vehicle classes. Fortunately, the industry is responding and has more recently started producing more fuel-efficient and emission compliant engines for medium and heavy-duty applications.

According to the California Energy Commission, the fuel efficiency of medium and heavy-duty vehicles will improve over current levels through the year 2050. Correspondingly, as the City is able to replace its medium and heavy-duty fleet, fuel efficiencies are expected to improve while reducing overall emissions.

Electronic Transportation Development Center (ETDC) of Silicon Valley: San José has partnered with the Electronic Transportation Development Center of Silicon Valley to bring together multiple manufacturers and service providers of clean air vehicle technologies. This effort has fostered the opportunities for emerging technologies and manufactures of these technologies to receive municipal fleet / end-user feedback on their products. This partnership will soon result in the development of EV vehicle applications that will be suited for a number of municipal operations.

A bicycle pilot project was also initiated this year at City Hall for City employees to use to attend site visits or off-site meetings that are within reasonable biking distance. In October, a bicycle reservation program for City Hall was added to the on-line Motor Pool Reservation system on the Intranet to further automate the bicycle reservation and use efforts.

Pilot More Fuel Efficient Patrol Vehicles:

Marked Police Patrol vehicles account for

approximately 14% of the City's fleet. With a goal of reducing operating costs, improving fuel economy and reducing overall exhaust emissions, a pilot program for the Chevrolet Impala Police Patrol Unit was implemented to review the fuel economy, mechanical performance and overall vehicle functionality as a San José Police Patrol unit. This pilot was also initiated as Ford Motor Company has announced that calendar year 2011 will be the final production year for their Crown Victoria Police Interceptor which is currently the predominant vehicle used for Police Patrol in San José. During the Impala pilot, the vehicle demonstrated a 27% increase in fuel economy. The initial pilot has been extended to consider vehicle modifications and alternative deployments within the Police Department.

Staff will continue to partner with the Police Department to evaluate the use of Impalas as well as other patrol vehicle alternatives.

Grants Received: The City received a Voluntary Low Emission Grant (VALE) from the Federal Aviation Administration (FAA) for vehicle replacement at San José Mineta Airport. A portion of the grant, \$ 88,866, was applied to replace gas powered light utility trucks with 15 electric vehicles.

Develop Partnerships: In 2009 the City worked on forming strategic partnerships with the ETDC to establish incubator companies and Silicon Valley Technology Companies with the goal of strengthening the necessary infrastructure and supply chain for electric vehicle and electric bicycle manufacturing, in concert with companies who specialize on expanding existing compressed natural gas infrastructure. These partnerships will play a critical role in replacing the City gas only powered fleet with green energy alternatives. Staff is also working with a company to explore solar charging infrastructure for light and heavy duty vehicle applications creating a green to green EV charging infrastructure.

BBC World Service Website: City staff was contacted by the BBC to profile San José's green fleet in the BBC climate change initiatives website. Apart from English, the site has been translated into 10 languages, and is being promoted across BBC World Service English and languages websites to their audiences around the world. In North America, other cities



DOT employees trying out the City bike pilot program



Electric light utility truck

highlighted include San Francisco for their solar program, Seattle for green building, and Toronto for deep water cooling.

English:

http://www.bbc.co.uk/worldservice/specialreports/2009/11/091124_climatechange_initiatives.shtml

Spanish:

http://www.bbc.co.uk/mundo/ciencia_tecnologia/2009/12/091203_iniciativas_locales.shtml

Vietnamese:

http://www.bbc.co.uk/vietnamese/world/2009/12/091204_climate_initiative.shtml

Portuguese: http://www.bbc.co.uk/portuguese/ciencia/2009/12/091201_info.shtml

Chinese:

http://www.bbc.co.uk/zhongwen/simp/indepth/2009/11/091124_included_initiatives.shtml

Legislation:

Running the entire fleet on alternative fuels is in alignment with AB 32- California Global Warming Solutions Act and AB 1493-Vehicular Emissions with a reduction target for 2012 GHG emissions of 25 % below 2003 levels. Annual vehicle emissions to date have been reduced by 26% since 2002.

Strategic Direction

The proposed greenhouse gas emission reduction goals are very aggressive. To achieve these goals, the automotive industry will need to continue to evolve and develop vehicle solutions that not only meet the stringent vehicle emissions goals, but also the operational needs of a municipal fleet. Success in achieving goal objectives remains focused on two approaches:

- 1) Replacing municipal fleet vehicles with alternatively fueled vehicles options, and;
- 2) Converting the fleet using alternative fuel options. Maintaining this focus will drive success for this Goal while helping achieve additional key milestones of reduced greenhouse gases resulting from vehicle exhaust emissions.

Electric Vehicle (EV)

Gov2Gov consortium: San José is a strategic partner with the City's of Oakland and San Francisco through the EV Gov2Gov consortium primarily focused on developing regional standards for EV technology and the creation of an EV charging corridor. The consortium has currently engaged a Coordinating Council whose goals are focused on preparing a regional response to the AB-118 solicitation.

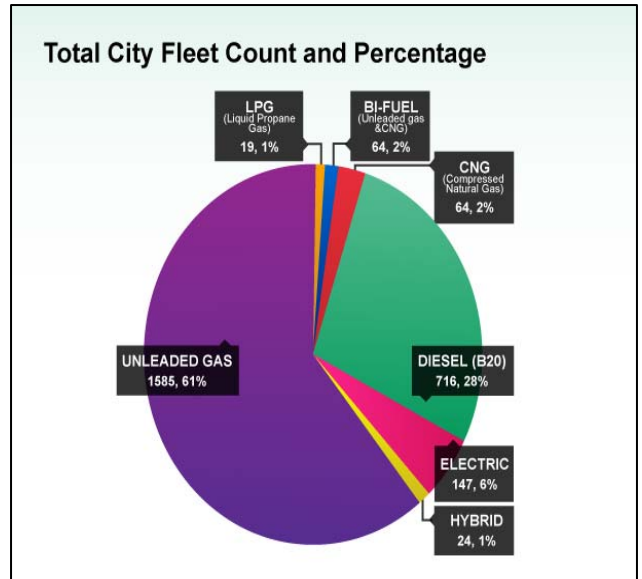
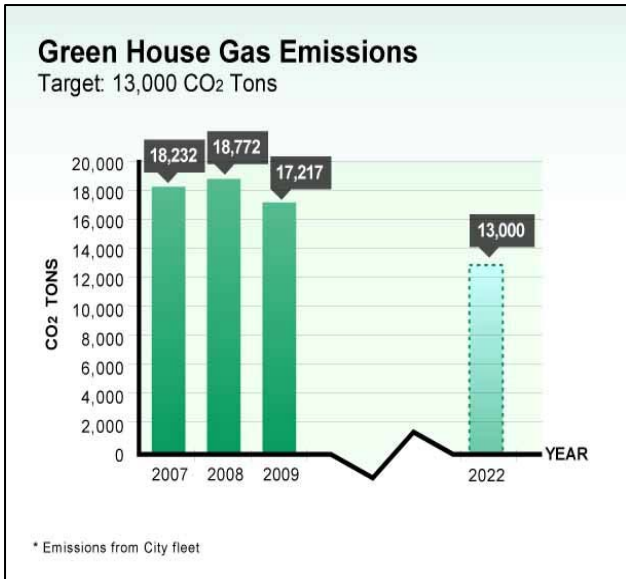
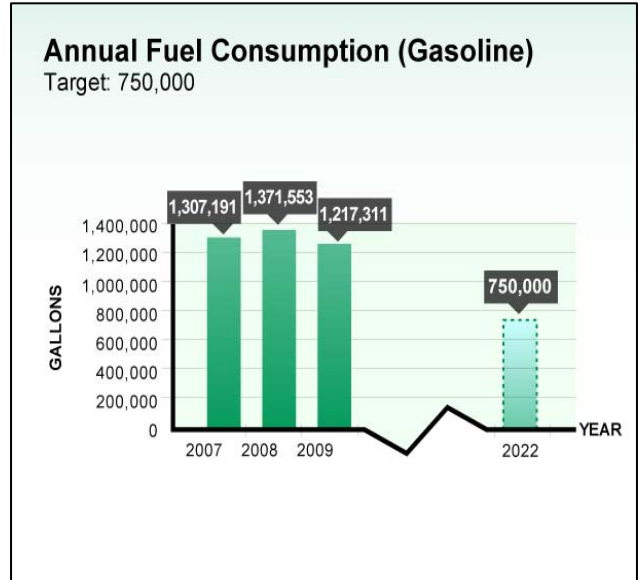
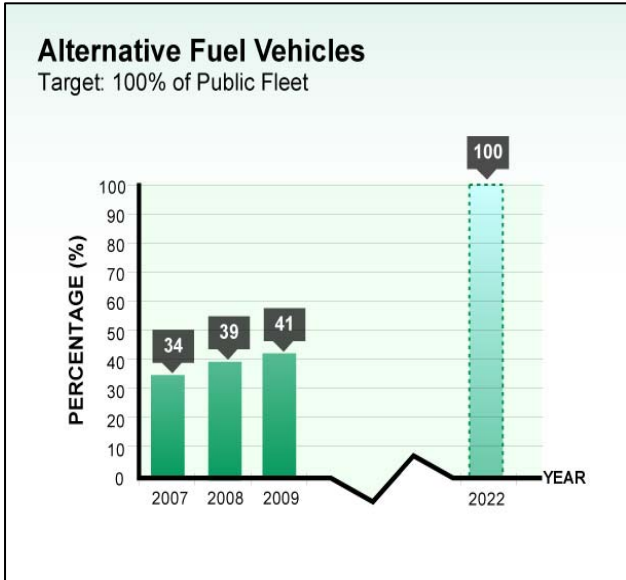
Climate Change

By switching to an alternative fuel fleet, the City plans to reduce corresponding greenhouse gas emissions from over 18,000 tons to 13,000 tons by 2022. Annual vehicle emissions have been reduced by 5.5% since 2007 and 26% since 2002. Vehicle emissions to date have been reduced by using biodiesel fuel along with increased emission controls and the infusion of more fuel efficient vehicles into the fleet.

Work Plan

Strategic Focus	Proposed Strategy	2009 Work Plan	2010 Work Plan
Lead by Example			
Reduce fuel consumption and GHG emissions	Use higher fuel efficiency vehicles in public safety fleet	Pilot 10 Chevrolet Impalas in police patrol vehicle fleet Status: At completion of the initial pilot, staff agreed that additional time was needed in the pilot to consider vehicle modifications and alternative deployments within the Police Department.	Pilot alternative vehicle manufacturers who offer purpose built patrol vehicles Introduce available hybrid technology into the larger heavier diesel powered fleet complement
Financing Mechanisms			
Reduce green house gas emissions from fleet	Utilize annual fleet replacement funding to replace fleet in accordance with the Green Fleet Policy; Identify additional funding needed for diesel emission retrofits; Pursue grant funding	Reduce emissions at Airport with federal grant dollars (VALE grant) Status: The 14 electric vehicles purchased with the grant funding have been placed into service.	Submit applications for grant funding opportunities through AB 118 for expansion of the plug in hybrid fleet and construction of solar charging infrastructure
Strategic Partnerships			
Expand alternative fuel infrastructure	Collaborate with other jurisdictions for regional compatibility	Develop regional standards and leverage procurement Status: Collaborating with local jurisdictions through Gov2Gov, the region has made strides in standardizing on EV charging system standards.	Collaborate with The ETDC and Gov2Gov in applying a diverse complement of EV vehicles and building a sustainable EV charging infrastructure throughout the City

Performance Metrics



Plant 100,000 New Trees & Replace 100% of Streetlights with Smart, Zero Emission Lighting

A walkable streetscape includes a healthy community forest of street trees and appropriate lighting. Planting 100,000 new trees and replacing all 62,000 of the City's streetlights with smart, zero emission lights will help San José "green" its transportation infrastructure and enhance the City's quality of life by making it more pleasant to walk the City by day and stargaze at night.



Sample LED pedestrian lighting

Trees benefit our City by shading houses, sidewalks, and streets, reducing air conditioning bills, softening the urban form, capturing greenhouse gases, filtering air pollutants, reducing erosion, sheltering wildlife, and boosting property values. San José has long recognized the desirability of trees in the urban environment. In 1951, the City enacted its first tree ordinance to protect existing trees and ensure that development of its many suburban neighborhoods would include new tree plantings. In 1982, San José became a "Tree City USA" and, in 1994, the City helped to sponsor and develop the non-profit Our City Forest. Additionally, the City signed the Urban Environmental Accords in 2005 which includes street tree planting goals and, in 2007, City Council adopted the Green Vision which includes the goal of planting 100,000 net new trees by 2022.

San José has received national media attention for its leadership on LED lighting. The potential for significant energy savings coupled with the availability of federal stimulus funds has prompted dozens of cities across the nation to install or consider installing LED streetlights, but most of these cities are replacing High-Pressure Sodium (HPS) lights with LEDs. Only a handful of local jurisdictions in the nation, including San José, use Low Pressure Sodium (LPS). In the 1980s, San José converted its streetlights from mercury vapor and incandescent to sodium vapor, primarily LPS because LPS is much more energy efficient than HPS. The narrow bandwidth of the light is also easy for Lick Observatory to screen out. However, cities that are now switching from HPS to LED are able to realize greater energy savings—estimates range between 40 and 60 percent. That is one of the reasons why San José has been pursuing the adoption of "smart" LED streetlights—streetlights that can be remotely controlled, communicate with one another, and be dimmed in the late evening hours where there are minimal to no traffic or safety concerns. Dimming the City's lights will make such

Easy Actions You Can Take Now

1. Plant a street or garden tree to save energy, sequester carbon, reduce runoff and increase neighborhood property values.
2. Volunteer to assist Our City Forest in neighborhood tree planting projects. For more information see <http://www.ourcityforest.org/>

conversions more economical as well as reduce wasted light while protecting Lick Observatory's ability to conduct astronomical research.

Achievements & Successes

Community Forest Program: In 2009, work was initiated to develop a comprehensive Community Forest program. This work has included the development of a strategic framework for achieving a Community Forestry master plan, the initiation of a complete street tree inventory and development of best management practices for tree planting and tree care.



Community Forestry Policy: A Council policy on Community Forestry is needed to provide clear guidance to drive all of the City's efforts and decisions on tree-related issues. The content of a proposed draft Community Forestry Policy has been developed and was presented and accepted by the Transportation and Environment (T&E) Committee in September. It is anticipated that this policy will be presented to the full City Council in February 2010.

Community Forest Master Plan: The strategic framework for the Master Plan lays out the vision, goals, and implementation strategies for the Community Forest Program. The framework provides the context, including the natural and political history of the City's forest as well as what is currently known about the status of the forest. The framework was brought forward and accepted by the T&E Committee in September.

Street Tree Inventory: In July 2009, 16 AmeriCorps trainees, obtained in conjunction with Our City Forest and funded through a CalFire grant, began work on a portion of the City's street tree inventory using handheld GPS units. Other portions of the City are being inventoried through additional efforts by Our City Forest and consultants. Additionally, DOT hired four student

Our City Forest

Our City Forest (OCF), a long-time nonprofit City partner, operates a comprehensive Community Forestry program for the City. Since its inception in 1994, over 50,000 trees have been planted. The Green Vision 100,000 Tree planting goal has been embraced by OCF as an exciting and ambitious phase in its ongoing efforts to grow, maintain and protect San José's Community Forest. OCF offers free trees for San José public spaces such as neighborhood parking strips, schools, and parks. Free tree eligibility is also determined depending on the available space, restrictions such as utilities, and importantly, if there is a willing steward to care for the trees. All interested parties must fill out an application and agree to care for and maintain the tree for at least three years which is the minimum time for a tree to get established.

Two key challenges related to funding that OCF has identified to achieve the 100,000 tree planting goal include:

- 1) How will tree purchase and planting costs be funded; and
 - 2) How will ongoing tree care and maintenance be funded?
- The non-profit has identified some innovative strategies to pursue to address these issues including:
1. Increase capacity of OCF's Community Tree Bank to cultivate approximately 5,000 trees annually.
 2. Continue to obtain non-City tree planting grants to pay for trees and stakes for San José.
 3. Provide a system for residents or other private property owners to report newly planted trees on private property to be tracked by OCF.
 4. Make tree care for difficult unadoptable City sites a priority by using volunteers or programs such as AmeriCorps.

interns to complete a statistically valid sample of randomized street segments which can be extrapolated to draw conclusions about the size and condition of the City's entire forest using iTree-Streets, an inventory program developed by the U.S. Forest Service. The data from the iTree-Streets effort produced an accurate estimate of the City's street tree population, indicating approximately 242,650 street trees in the City and 87,580 vacant plantable sites within the public right of way that could possibly receive a portion of the 100,000 Green Vision trees. To date, all of these various inventory efforts together have yielded a complete inventory for approximately one half of the City's street trees and planting sites.

Street Tree Tracking: Work has been initiated to coordinate with other City departments that are in some way involved with planting trees, including Development Services (Public Works (PW) and Planning, Building, and Code Enforcement (PBCE)), Parks, Recreation and Neighborhood Services (PRNS), Environmental Services Department (ESD), Airport and the Redevelopment Agency (SJRA). DOT has utilized in-house expertise to initiate the design and construction of a new tree database that will provide significant functionality enhancements and improvements beyond the capability of the existing Tree Master application. The new relational database can work in conjunction with the previous one so that historical data is preserved. Sustainable tracking and reporting mechanisms still need to be developed in order to more accurately and completely account for private property tree plantings.

LED Streetlight Installations: The City has six LED streetlight deployment projects involving more than 2,000 of the City's 62,000 lights in various stages of development. Once completed, these projects are expected to reduce the City's \$4 million annual streetlight energy bill by roughly \$130,000 annually. In Summer 2009, 118 programmable energy efficient streetlights were installed in the Cassell residential neighborhood. The lights, funded by a federal Community Development Block Grant (CDBG), comply with the new Public Streetlighting Policy and initial feedback from residents is very positive. Additionally, 150 lights in North San José are planned for conversion to "smart" LED streetlights in January 2010. This project will test a wireless advanced monitoring and control system.



PG&E Emerging Technologies Program. Cassel neighborhood streetlights on Adrian Way before and after

Streetlight projects that received grant funding in 2009 and are slated for design and installation in 2010 include: a \$215,000 CDBG project to convert approximately 150 streetlights to "smart" LEDs; and \$2 million in Federal Recovery Act funds to convert approximately 1500 streetlights to "smart" LEDs along major arterials and special districts. Additionally, the

Redevelopment Agency is funding a \$557,000 streetscape and lighting improvement project on S. 24th St. that will be installed in early 2010.

Streetlighting Master Plan: In accordance with the new Public Streetlighting Policy adopted in December 2008, development of a Streetlighting Master Plan that will identify where, when and by what degree the City can vary the lighting level of its streetlights has begun. Staff began implementing a series of LED streetlight deployment projects to better understand the potential and challenges posed by this emerging technology. One project includes evaluation of another energy-efficient lighting technology - induction lights. Next steps in 2010 include developing a conversion guide from low pressure sodium (LPS) to LED and holding community streetlighting demonstrations. The tests will identify public preference for various lighting technologies as well as the functional visibility they provide. Staff proposes to use this information in addition to the 2009 deployment projects to draft a Master Plan for adoption by Council in Summer 2010.

Legislation

The California Public Utility Commission's (CPUC) adopted tariffs for LED lights in Summer 2009; however, to take full advantage of cost savings achievable through dimming lights, the City must be able to individually meter its lights. Currently there is no cost-effective way to individually meter the City's streetlights that meets the CPUC metering standard. Staff intends to work with Pacific Gas and Electric (PG&E) and the CPUC to resolve this issue. The City has already begun a conversation with PG&E towards this end.

Caltrans: One strategy the California Department of Transportation is employing to meet the State's ambitious greenhouse reduction goals is to move to more energy efficient roadway lights. Caltrans District 4, the District that serves the San Francisco Bay Area and the largest District office in California, has been testing the use of Light Emitting Diode (LED) roadway lights on area bridges, at approaches to San Francisco International Airport, and on highway intersections around the region over the last two years.

The Department has already or plans to install LED streetlights at the intersection of a number of San Jose area highways including I-280/680 and Route 101, Route 85 and I-280, and I-880 and Hwy 101. Caltrans is testing the durability of the lights as well as their energy savings. The anticipated longevity of LEDs - more than ten years compared to the typical four-year lifespan of the lights being replaced—will mean the agency will not have to close down lanes as frequently to replace bulbs. And, thus far Caltrans is seeing energy savings of 50% on the lights. The Department says, the response from Caltrans maintenance staff and the public have been uniformly positive.

Strategic Direction

Although many steps have been taken to date towards the development of a comprehensive Community Forest Program, there is still an extensive amount of work that must be done. Unfortunately, due to budgetary constraints, work on the Master Plan effort and policy development ended in October 2009. The street tree

inventory, along with best management practices efforts will continue to the extent possible. If additionally funding sources can be identified, it may be possible to have a complete inventory done within 2-3 years. Once the inventory is established, further work can be done to explore the feasibility of an alternate funding source that can provide for the ongoing planting, care and maintenance of the City's street trees. Staff will continue to seek new funding sources and look for ways to expand its strategic partnerships with Our City Forest and other organizations to continue to move towards the goal of a comprehensive Community Forest Program.

San José is making great strides in developing specifications and design guidelines for converting its Low- and High Pressure Sodium lights to white source streetlights such as LEDs. Switching to these more energy efficient lights and dimming them during the late night hours will allow the City to cut its energy consumption by more than half. But to capture the full financial benefit of dimming, the City will need to shift from a non-meter rate (the billing methodology currently used for the vast majority of streetlights in the nation) to a metered rate.

The “smart” LED streetlights the City is installing have, or can include, the capability to monitor (meter) electricity consumption. But it’s never been done before. To get from here to there will require overcoming regulatory, technical, and procedural hurdles. The City intends to work with PG&E and the California Public Utility Commission, as well as other interested stakeholders, to resolve these issues as expeditiously as possible to maximize the City’s energy savings and blaze a path for others to follow.

Climate Change

A tree planted in an urban setting and allowed to grow for at least 10 years sequesters an approximate total of 0.035 metric tons of carbon over the 10-year period. Planting a total of 100,000 additional trees will result in a sequestration of approximately 3,550 metric tons of CO₂.

San José’s 62,000 streetlights currently use approximately 17 M kWh/year of energy which equates to 8,493 metric tons of CO₂. Replacing all of San José’s with zero emission renewable energy streetlights will reduce associated CO₂ emission to zero.

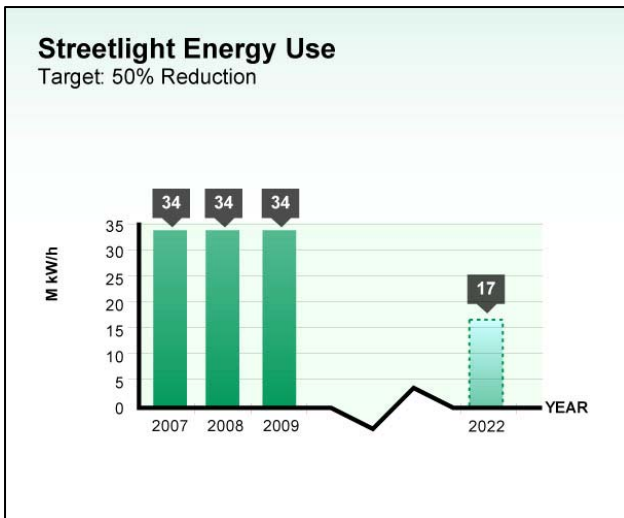
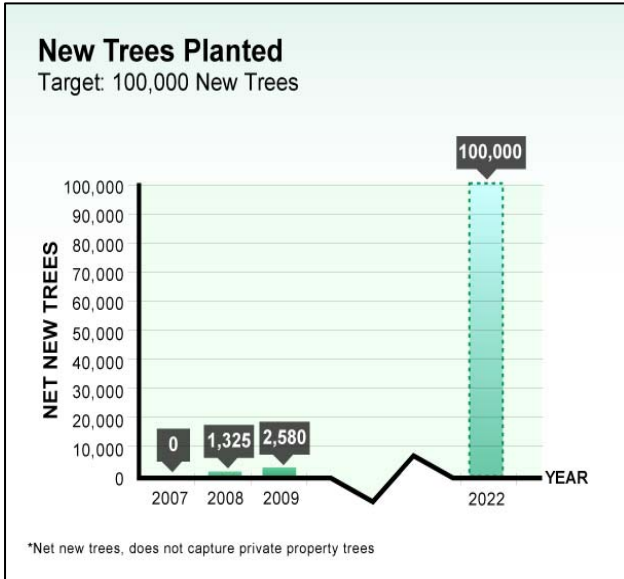
Work Plan

Strategic Focus	Proposed Strategy	2009 Work Plan	2010 Work Plan
Leading by Example			
Reduce Citywide streetlight energy consumption	Develop Lighting Master Plan with criteria for adaptive lighting and potentially cap energy use for public streetlights	<p>Council adoption of Streetlight Master Plan; Outdoor Lighting on Private Developments City Council Policy to be amended.</p> <p>Status: Streetlight Master Plan still under development. More data is required to inform the Plan. Staff installed 118 “Smart” LED streetlights in a residential neighborhood in East San José. Staff has begun the procurement process to install another 150 smart LED streetlights using a different control system in an industrial area in North San José.</p> <p>Outdoor Lighting on Private Developments City Council Policy was not amended this</p>	<p>Council adoption of Streetlight Master Plan Summer 2010.</p> <p>Conduct two community demonstrations of LED street lights with dimming capabilities. This data will help inform the development of the Streetlight Master Plan.</p> <p>City Council adoption of amended Outdoor Lighting on Private Developments policy consistent with the Streetlight Master Plan.</p>

Strategic Focus	Proposed Strategy	2009 Work Plan	2010 Work Plan
		year because it is progressing in tandem with the Streetlight Master Plan to ensure consistency.	
Advocating Policies			
Change State regulation to allow cost effective metering of individual lights	Advocate CPUC regulatory changes	<p>CPUC adoption of: tariffs for LED lights; evaluating technology that will enable billing based on real energy consumption</p> <p>Status: CPUC adopted tariffs for LED lights in Summer 2009. Staff continues to work with PG&E and other cities to advocate for a cost-effective way to track streetlight energy consumption so that municipalities can get credit for dimming lights and thereby reducing their energy consumption.</p>	Continue to work with PG&E, PUC and other cities to advocate for a cost-effective way to track streetlight energy consumption so that municipalities can get credit for dimming their lights and thereby reducing their energy consumption.
Financing Mechanisms			
Identify funds for upgrade to smart, zero emission streetlights	Require energy efficiency lighting for new development; Identify Federal & City/SJRA funding sources	<p>Install \$500,000 worth of smart streetlights.</p> <p>Status: The City secured \$200,000 in CDBG funds, and installed 118 LED lights in the Cassel neighborhood.</p> <p>The City secured the following funding in 2009 for LED installation in 2010: \$200,000 from the Redevelopment Fund, \$2 million in Energy Efficiency and Conservation Grant funds, and \$250,000 in CDBG-Stimulus for to install smart LED streetlights in San José for a total of \$2.45 million dollars.</p>	Report to Council in Spring on financing strategies the City could pursue to fund additional conversion projects.
Strategic Partnerships			

Strategic Focus	Proposed Strategy	2009 Work Plan	2010 Work Plan
Expand, maintain, and track new community forest tree plantings through partnerships with residents and community groups	Develop partnerships with California Climate Action Registry to explore carbon offset program and develop system to comprehensively track net new trees planted.	Provide ongoing funding for City resources and to support partnerships. Expand tree planting program with the California Climate Action Registry and Our City Forest Status: After examination of Climate Action Registry program, it was determined that the City would not be able to participate due to commitment requirements and cost issues. Partnership with Our City Forest has been expanded to include using the AmeriCorps program for the street tree inventory project and preparation of the Community Forest Best Management Practices Manual. The iTree-Streets inventory completed in 2009 estimated that there are 242,650 street trees in San José and 87,580 vacant street tree planting sites.	Continue progress on finishing the complete street tree inventory effort. Seek grant funding and other necessary resources to finish the street tree inventory, prepare a Community Forest Master Plan, and fund additional tree planting projects in areas of the City deficient in adequate tree canopy.
Power existing streetlights with renewable energy	Partner with private entities to develop cost-effective method to adapt existing streetlights to capture and use renewable energy	Identify potential partners to prototype renewable energy systems. Status: A solar/wind LED streetlight donated to the City as part of the Green Vision education and demonstration project will be tested.	Develop a strategy to backfill City's streetlight energy requirements with renewable energy. Identify potential partners to demonstrate the viability of solar cooling stations to power streetlights.

Performance Metrics



Special Designations & Awards:

- 2009 California Parks and Recreation Society Award of Excellence for the Airport Parkway Undercrossing
- 2009 California Trails and Greenways Conference Award of Merit for the Trail Program web site
- Ranked # 3 by Forbes.com for Best Outdoor City in 2009
- 2009 platinum Bike Friendly Workplace award from the Silicon Valley Bicycle Coalition
- Ranked No. 19 as part of the 2009 Top 25 Best Walking Cities award from *Prevention Magazine*

Grant Funding: Grant funding plays a critical role in the development of trails and on-street bikeways in San José. Staff actively monitors and applies for grants at the local, State and Federal level such as the Santa Clara Open Space District grant and Prop 84. In 2009, staff has secured Council support for submission of \$2,050,000 in trail grant requests and \$1,200,000 in on-street bikeway grant requests. To date, \$660,000 in trail grants has been secured and \$350,000 is pending. \$700,000 in on-street bikeway grants have been secured (with the balance still pending). Most grants require that local funds “front” expenditures and often require a local match. Staff notes that due to decreased staffing and budgetary issues at the State level, the State’s ability to manage its grant programs may become a critical issue.



Parks Foundation: The City successfully created a Parks Foundation in 2009. Funds collected by the Foundation may be used for park and trail operation and development. The Board was appointed in Summer 2009 and convened in the Fall for the first time.

The Trail Count Survey: For the third year in a row, staff conducted the trail count survey on Wednesday, September 23. Many community volunteers and non-profit organizations, such as the Silicon Valley Bicycle Coalition and Friends of the Guadalupe River Trail & Gardens, played a key role staffing counting stations and collecting data. Results showed an overall 9.6% increase use of trails during AM and PM peak commute periods and 68% of respondents reported that their use of the trail network has increased significantly or a little in the past two years. The survey demonstrates high usage of trails, helps staff understand community needs and desires as projects are designed, and demonstrates to grant agencies that trails are popular and play an important role in the area’s overall transportation system. The summary report can be found at



Trail Count Survey volunteer tracking trail use

<http://www.sjpark.org/Trails/documents/TrailCount2009SummaryReportfinal.pdf>

Bike Plan 2020: In November 2009, Council adopted an ambitious Bike Plan 2020 which identified a 500 mile bikeway network consisting of interconnected trails and on-street bikeways, increasing the percentage of commute trips from 1.2% to 5%, and reducing bike collisions by

50%. The Plan also recommends support infrastructure, such as bike parking, traffic signals that can detect waiting bicyclists and paving bike lanes with a different color to make them more visible and safer. The entire Plan can be found at

http://www.sanjoseca.gov/transportation/bikeped/bikeped_update.asp

Climate Change

Transportation in San José accounts for approximately 40% of total greenhouse gas emissions emitted in the City. The trail and bike lane network makes it increasingly viable for residents and visitors alike to use bicycles as a safe, reliable, and less polluting way to commute, run errands, or visit attractions. As more residents and visitors use the bike network as an alternative to the car, greenhouse gas emissions related to vehicle use and vehicle miles traveled will be reduced resulting in approximately 139 MT of CO₂ emissions avoided.

Silicon Valley Bicycle Coalition

(SVBC): The Silicon Valley Bicycle Coalition promotes bicycling for everyday use because they see bicycling as a central solution to the environmental, health, and social problems facing the planet. The Coalition points to bicycling as a very clean and healthy transportation solution. The Coalition's programs encourage bicycle and motorist awareness and teach bicyclists safe traffic riding skills. They also advocate for more bicycle-friendly roads and connecting the trails across the region

Work Plan

Strategic Focus	Proposed Strategy	2009 Work Plan	2010 Work Plan
Leading by Example			
Expand City's bike network	Complete and implement Bike Plan Update	Bike Plan Update outreach and draft plan by March. Complete 5 miles of bike lanes. Status: Bike Plan adopted by Council November 2009. Five miles of bike lanes completed. 400 bike parking spaces installed	Install 10 miles of bike lanes and routes including two cross-town Bike Boulevards. Install 500 public bike parking spaces.
Financing Mechanisms			
Fund expansion of trail network	Work with regional, state, federal and private entities to secure funding and sponsorship.	Seek funding for trails at the regional, state and federal level, with a target of \$9.9 million annually, to stay on track for Green Vision goal Status: Over \$1.3 million in grant funding received.	Seek Council direction to pursue \$15.4M in Proposition 84 funds for trail development. Other grant programs will be brought to the attention of Council as programs are announced by various funding agencies.
Strategic Partnerships			
Expand and maintain trail network through	Establish partnerships with non profits and private	Council adoption of volunteer policy. Increase miles adopted from 3.2 to 4.2 miles	Define and initiate a Trail Watch program, with volunteers trained

Strategic Focus	Proposed Strategy	2009 Work Plan	2010 Work Plan
partnerships	entities	<p>through Adopt a Trail program. Establish a Parks Foundation to support advocacy and fund raising for open space.</p> <p>Status: A total of 5.8 miles of trail are adopted. The Parks Foundation was established in Summer 2009.</p>	specifically to report maintenance issues to Parks Staff to support more rapid and well-documented maintenance activities.

Performance Metrics



Glossary

Abbreviation	Description
AB	Assembly Bill
ABAG	Association of Bay Area Governments
AFY	Acre Foot/Year
AIA	American Institute of Architects
AQI	Air Quality Index
ARRA	American Recovery and Reinvestment Act
ARWTF	Advanced Recycled Water Treatment Facility
BAAQMD	Bay Area Air Quality Management District
BACWA	Bay Area Clean Water Agency
BIG	Build it Green
BTA	Bicycle Transportation Account
CAEATFA	California Alternative Energy and Advanced Transportation Financing Authority
CAL FIRE	California Department of Forestry and Fire Protection
CAP	Climate Action Plan
CDBG	Community Development Block Grant
CDDD	Construction Demolition Diversion Deposit Program
C&D	Construction and Demolition
CEC	California Energy Commission
CEO	Chief Executive Officer
CEQA	California Environmental Quality Act
CFL	Compact Fluorescent Light
CNG	Compressed natural gas
CTO	Clean Tech Open
DOE	Department of Energy
EB MUD	East Bay Municipal Utility District
EBC	Environmental Business Cluster
EDA	Economic Development Agency
EECBG	Energy Efficiency and Conservation Block Grant
EIR	Environmental Impact Report
EP3	Environmentally Preferable Procurement Policy
EPP	Environmentally Preferable Procurement
EPR	Extended Producer Responsibility
GHG	Greenhouse gas
GPCD	Gallons per Capita per Day
IEDC	International Economic Development Council
IPCC	Intergovernmental Panel on Climate Change
kW	Kilowatt
LBNL	Lawrence Berkeley National Lab
LED	Light Emitting Diode
LEED	Leadership in Energy and Environmental Design
LPG	Liquid Propane Gas
NEPA	National Environmental Policy Act
NETS	National Establishments Time Series
MW	Megawatt
MGD	Million gallons per day
MMT	Million metric tons
MT	Metric tons
MTC	Manufacturing tax credits
OCF	Our City Forest
PACE	Property Assessed Clean Energy

Abbreviation	Description
PG&E	Pacific Gas and Electric
PPA	Power Purchase Agreement
PUC	California Public Utilities Commission
PV	Photovoltaic
RFI	Request for Information
RFP	Request for Proposals
RPN	Responsible Purchasing Network
RPS	Renewable Portfolio Standards
RTP	Recreational Trails Program
SB	Senate Bill
SBWR	South Bay Water Recycling
SCVWD	Santa Clara Valley Water District
SEP	Strategic Energy Plan
SF PUC	San Francisco Public Utilities Commission
SJ	San José
SJRA	San José Redevelopment Agency
SJUSD	The San José Unified School District
SNI	Strong Neighborhoods Initiative
STI	Special tenant improvement
SVBC	Silicon Valley Bicycle Coalition
UL	Underwriters Laboratory's
USGBC	United States Green Building Council
VALE	Voluntary Airport Low Emission
VTA	Santa Clara Valley Transportation Authority
WPCP	San José/Santa Clara Water Pollution Control Plant

Appendix A – Comprehensive Work Plan

Leading by Example

Strategic Focus	Proposed Strategy	2009 Work Plan	2010 Work Plan
1. Identify space for local clean tech companies to manufacture in San José (25,000 Clean Tech Jobs)	Work with key property owners and evaluate use of public lands for industrial development	Identify appropriate sites, including public land for 2M square feet of demand for manufacturing space Status: Nanosolar moving forward on 125,000 sq. ft expansion. Ongoing discussions with SoloPower.	Long range planning through Economic Development Strategy Update, General Plan Update and WPCP Master Plan effort to identify and designate lands for clean tech manufacturing.
2. Demonstrate clean transportation, renewable energy, smart grid and energy efficiency (25,000 Clean Tech Jobs)	Pursue increased flexibility in implementing demonstration policy to allow for more clean technologies deployed in San Jose facilities	N/A	Deploy demonstration projects in City owned buildings and land to support commercialization of clean technologies
3. Greening of small businesses through BusinessOwners Space (25,000 Clean Tech Jobs)	Launch resources to support greening of small businesses	N/A	Develop a new Green Resource page on BusinessOwnerSpace.com
4. Implement energy efficiency projects in City facilities (50% Energy Reduction)	Partner with PG&E to conduct audits; identify additional sources of funds for energy efficiency projects	Complete 20 energy audits and energy efficiency projects that save at least 20% one year after implementation Status: Completed 27 audits. Installed energy efficiency projects at 21 City facilities. Reduced citywide energy usage by 4.3%. First two years savings redirected to City Energy Fund	Complete 35 energy audits and related energy efficiency projects. Reduce municipal energy use by 5%.

Strategic Focus	Proposed Strategy	2009 Work Plan	2010 Work Plan
5. Install Solar on City Facilities (<i>100% Clean, Renewable Electricity</i>)	Power Purchase Agreement RFP finalized and available for all City facility solar projects; remove barriers to solar installation for all City facilities	1.5MW on City facilities (10MW by 2010) and draft City guidance document applicable to all City facilities to expedite installations Status: Power Purchase Agreement (PPA) Request for Proposals released in Fall 2009.	Bring negotiated PPA for 1.3 MW at Central Service Yard to Council in early 2010 and install systems by Summer 2010. Develop a comprehensive strategy for the remaining MWs and bring forward to Council in Spring 2010.
6. Implement Private Sector Policy for New Construction (<i>50 Million Sq. Ft. of Green Building</i>)	Receive California Energy Commission (CEC) approval; develop deposit program; recommend ordinance adoption	Policy implementation effective August Status: Private Sector Green Building Policy implemented and in effect. CEC approval received for Policy implementation. Ordinance No. 28622 adopted August 4, 2009, and effective September 8, 2009 for new private-sector building permit applications. Deposit program developed.	Update Policy and Ordinance to incorporate 2010 California Green Building Code regulations and City of San José requirements for new buildings, retrofits, and rehabs as appropriate.
7. Certify existing City facilities using LEED-EB Rating System (<i>50 Million Sq. Ft. of Green Building</i>)	Participate in USGBC Portfolio Program	Develop Portfolio Program pre-certification package for certification of existing City facilities Status: Portfolio Program package drafted.	Submit Portfolio Program pre-certification package to USGBC Prepare four City buildings for certification under LEED-EB Portfolio Program Plan for LEED-EB certification of additional City facilities
8. Advance Commercial Redesign (<i>Zero Waste & Waste to Energy</i>)	Negotiate contracts that comply with City policy and provide cost-efficient services; identify sites for infrastructure	Design new commercial solid waste system; initiate procurement process for selecting new commercial haulers/recyclers. Status: Request for Proposals for Commercial Organics	Conduct a procurement process for a new commercial solid waste system, including organics processing, select a service provider(s), and bring award recommendations to Council for consideration

Strategic Focus	Proposed Strategy	2009 Work Plan	2010 Work Plan
		processing being developed.	
9. Streamline Construction Demolition Diversion Deposit (CDDD) program (<i>Zero Waste & Waste to Energy</i>)	Develop new program/reporting requirements for C&D facilities	<p>Improve CDDD program to increase waste diversion and streamline processes</p> <p>Status: Proposed program and administrative modifications presented to T&E Committee in December 2009</p>	Implementation of CDDD proposed modifications.
10. Eliminate litter to achieve Zero Waste (<i>Zero Waste & Waste to Energy</i>)	Reduce use of disposable, single use items that contribute to litter, including single-use carryout bags, water bottles, and polystyrene takeout food packaging.	<p>Develop policies and programs to reduce litter</p> <p>Status: Council directed staff to develop an ordinance for consideration to reduce single use carryout bags</p> <p>Staff initiated an EIR processes and a comprehensive stakeholder review process for crafting the ordinance.</p> <p>Council adopted a policy banning the use of Styrofoam takeout food containers at special events on City property.</p>	<p>Develop policies and programs to reduce litter</p> <p>Submit EIR to Council for finalization and ordinance to Council for adoption in Spring 2010</p> <p>Initiate transition to support new ordinance</p> <p>Implement Bring Your Own Bag Campaign</p>
11. Expand uses of Recycled Water (<i>Recycle or Beneficially Reuse Wastewater</i>)	Re-evaluate and expand criteria for new developments in the vicinity of SBWR pipeline alignments	<p>Adoption of an ordinance for new development</p> <p>Status: Proposed ordinance developed and presented to Transportation and Environment Committee in September 2009. Outreach ongoing.</p>	Continue to work with development industry to craft an appropriate ordinance.

Strategic Focus	Proposed Strategy	2009 Work Plan	2010 Work Plan
12. Reduce fuel consumption and GHG emissions (<i>100% Public Fleet on Alternative Fuels</i>)	Use higher fuel efficiency vehicles in public safety fleet	<p>Pilot 10 Chevrolet Impalas in police patrol vehicle fleet</p> <p>Status: At completion of the initial pilot, staff agreed that additional time was needed in the pilot to consider vehicle modifications and alternative deployments within the Police Department.</p>	<p>Pilot alternative vehicle manufacturers who offer purpose built patrol vehicles</p> <p>Introduce available hybrid technology into the larger heavier diesel powered fleet complement</p>
13. Reduce Citywide streetlight energy consumption (<i>100,000 Trees & Zero Emission Lights</i>)	Develop Lighting Master Plan with criteria for adaptive lighting and potentially cap energy use for public streetlights	<p>Council adoption of Streetlight Master Plan; Council adoption of private streetlighting policy for new development</p> <p>Status: Streetlight Master Plan still under development. More data is required to inform the Plan. Staff installed 118 “Smart” LED streetlights in a residential neighborhood in East San José. Staff has begun the procurement process to install another 150 smart LED streetlights using a different control system in an industrial area in North San José.</p> <p>Outdoor Lighting on Private Developments City Council Policy was not amended this year because it is progressing in tandem with the Streetlight Master Plan to ensure consistency.</p>	<p>Council adoption of Streetlight Master Plan Summer 2010</p> <p>Conduct two community demonstrations of LED street lights with dimming capabilities. This data will help inform the development of the Streetlight Master Plan.</p> <p>Council adoption of Outdoor Lighting on Private Development policy consistent with the Streetlight Master Plan.</p>
14. Expand City’s bike network (<i>100 Miles of Interconnected Trails</i>)	Complete and implement Bike Plan Update	Bike Plan Update outreach and draft plan by March. Complete 5 miles of bike lanes.	Install 10 miles of bike lanes and routes including two cross-town Bike Boulevards.

Strategic Focus	Proposed Strategy	2009 Work Plan	2010 Work Plan
		<p>Status: Bike Plan adopted by Council November 2009. Five miles of bike lanes completed. 400 bike parking spaces installed</p>	<p>Install 500 public bike parking spaces.</p>

Advocating Policies

Strategic Focus	Proposed Strategy	2009 Work Plan	2010 Work Plan
1. Develop and implement policies to encourage expansion of existing, and development of new clean tech companies, and production and markets for clean tech products (25,000 Clean Tech Jobs)	Expand Fed/State incentives to promote manufacturing and consumer adoption of California products	Pursue implementation of adopted Clean Tech Legislative Agenda Status: Supported legislative efforts, funding opportunities and policy development to advance adopted Clean Tech Agenda.	Ongoing efforts to support Clean Tech Agenda.
2. Identify & remove barriers to creating energy improvement areas and smart grids(50% Energy Reduction)	Work with PG&E, California Energy Commission and CPUC to advance use of energy areas or smart grids; Implement AB811 or PACE financing districts that will encompass both solar and energy efficiency installation, to be rolled out in conjunction with community education efforts.	Explore potential for smart grid pilot within one or more areas of San José Status: No funding received to implement a smart grid project in San José. Council approved initiating action to become a pilot program for the CaliforniaFirst AB811/PACE Program.	Support state legislation to enable cities and companies to effectively offer community choices including microgrids and energy improvement districts. Launch the CaliforniaFirst program with outreach to residents and businesses. Pursue funding opportunities.
3. Remove regulatory barriers to widespread adoption of solar (100% Clean, Renewable Electricity)	Work with CPUC, utilities and others to establish fair, appropriate and reasonable tariffs to encourage expansion of solar	Implementation of AB2466, which allows cities to install up to 1WM of solar beyond use need on a city property and apply the excess solar to the energy needs at a different city facility. Pursue feed-in tariffs to encourage expanded installation of solar.	Implementation of AB2466

Strategic Focus	Proposed Strategy	2009 Work Plan	2010 Work Plan
		<p>Status: Awaiting final determination of CPUC regarding tariffs associated with AB2466</p>	
<p>4. Change State regulation to allow cost effective metering of individual lights <i>(100,000 Trees & Zero Emission Lights)</i></p>	<p>Advocate CPUC regulatory changes</p>	<p>CPUC adoption of: tariffs for LED lights; evaluating technology that will enable billing based on real energy consumption</p> <p>Status: CPUC adopted tariffs for LED lights in Summer 2009. Staff continues to work with PG&E and other cities to advocate for a cost-effective way to track streetlight energy consumption so that municipalities can get credit for dimming lights and thereby reducing their energy consumption.</p>	<p>Continue to work with PG&E, PUC and other cities to advocate for a cost-effective way to track streetlight energy consumption so that municipalities can get credit for dimming their lights and thereby reducing their energy consumption.</p>

Financing Mechanisms

Strategic Focus	Proposed Strategy	2009 Work Plan	2010 Work Plan
1. Support for incubators and commercialization of clean tech products, and innovation clusters (25,000 Clean Tech Jobs)	Compete for federal and state funding opportunities to support clean tech sector	N/A	Apply for grants at the federal and state level to support clean technology sector
2. Support energy efficiency programs and retrofits (50% Energy Reduction)	Facilitate collaboration between various community providers to develop new and existing funding mechanisms for energy efficiency improvements	10 nonprofits and other service agencies receive funding for energy efficiency improvements Status: 15 nonprofits and 90 businesses were served.	Implement Silicon Valley Energy Watch energy efficiency education and outreach programs. Provide approximately 250 moderate-income homes with energy efficiency education, audits, and direct installation of energy efficiency measures
3. Support solar programs for rental markets; and other innovative financing mechanisms (100% Clean, Renewable Electricity)	Work with city departments, CPUC, PG&E, and CEC to implement solar programs for multi-family and low income residents; Develop integrated financing offerings for the community	Low-income and multifamily solar installations are increased by 15% Status: PV systems were installed through collaborative efforts with Habitat for Humanity and GRID Alternatives.	Conduct outreach to low-income and multifamily property owners on the CaliforniaFIRST program.
4. Pursue implementation of clean energy municipal financing for the community (100% Clean, Renewable Electricity)	Participate in regional efforts and examine development of City-wide clean energy financing	Establish a model for clean energy municipal financing by December Status: City finalizing participation in the California State Communities Development Authority's pilot CaliforniaFIRST Program which provides financing to be paid back over twenty years	Bring Resolution to Join the CaliforniaFIRST Program to Council January 2010. If approved, begin Program implementation to San José property owners by Summer 2010.

Strategic Focus	Proposed Strategy	2009 Work Plan	2010 Work Plan
		on property tax bills.	
5. Finance expanded recycled water infrastructure (<i>Recycle or Beneficially Reuse Wastewater</i>)	Development fee to support recycle water	Recommend Development Fee for Council Approval by June Status: On hold due to decline in development activity.	Pursue grant funding and partnerships.
6. Reduce green house gas emissions from fleet (<i>100% Public Fleet on Alternative Fuels</i>)	Utilize annual fleet replacement funding to replace fleet in accordance with the Green Fleet Policy; Identify additional funding needed for diesel emission retrofits; Pursue grant funding	Reduce emissions at Airport with federal grant dollars (VALE grant) Status: The 14 electric vehicles purchased with the grant funding have been placed into service.	Submit applications for grant funding opportunities through AB 118 for expansion of the plug in hybrid fleet and construction of solar charging infrastructure
7. Identify funds for upgrade to smart, zero emission streetlights (<i>100,000 Trees & Zero Emission Lights</i>)	Require energy efficiency lighting for new development; Identify Federal & City/SJRA funding sources	Install \$500,000 worth of smart streetlights. Status: The City secured \$200,000 in CDBG funds, and installed 118 LED lights in the Cassel neighborhood. The City secured the following funding in 2009 for LED installation in 2010: \$200,000 from the Redevelopment Fund, \$2 million in Energy Efficiency and Conservation Grant funds, and \$250,000 in CDBG-Stimulus for to install smart LED streetlights in San José for a total of \$2.45 million dollars.	Report to Council in Spring on financing strategies the City could pursue to fund additional conversion projects.
8. Fund expansion of trail network (<i>100 Miles of Interconnected Trails</i>)	Work with regional, state, federal and private entities to secure funding and sponsorship.	Seek funding for trails at the regional, state and federal level, with a target of \$9.9 million annually, to stay on track for	Seek Council direction to pursue \$15.4M in Proposition 84 funds for trail development. Other grant programs will be brought to the attention of Council as programs are announced

Strategic Focus	Proposed Strategy	2009 Work Plan	2010 Work Plan
		Green Vision goal Status: Over \$1.3 million in grant funding received.	by various funding agencies.

Strategic Partnerships

Strategic Focus	Proposed Strategy	2009 Work Plan	2010 Work Plan
<p>1. Coordinate workforce development</p> <p>Green initiatives for workforce development <i>(25,000 Clean Tech Jobs)</i></p>	<p>Develop regional strategy to coordinate clean tech career training programs</p> <p>Well-trained, skilled workforce to support the clean tech sector</p>	<p>Identify key partners, inventory activities, align efforts, and launch programs</p> <p>Status: Completed RFI to identify curriculums in emerging green career sectors</p>	<p>Through the Cohort Training Pilot, job seekers will be able to take fully subsidized classes in peer groups. Nine courses will be offered in 2010, such as: solar photovoltaics installation, green building construction, water utilities technicians, and energy specialist training. The 2010 enrollment goal is 100+ participants, at a minimum of 15 trainees per course.</p>
<p>2. Expand knowledge and awareness of energy efficiency program resources <i>(50% Energy Reduction)</i></p>	<p>Work in partnership with businesses, energy resource providers, Bay Area Air Quality Management Association, and organizations throughout community</p>	<p>10% increase in number of San José residents and businesses receiving energy efficiency services</p> <p>Status: Contracted with PG&E to provide community energy efficiency education and referral to audit and energy efficiency project implementation funded by PG&E.</p> <p>Began work to link energy efficiency programs to workforce development activities, including training, apprenticeships, and volunteer opportunities.</p>	<p>Implement Silicon Valley Energy Watch small business and nonprofit audit and retrofit programs.</p> <p>Implement Low/Moderate Income Energy Efficiency program for residents between 200% of Federal Poverty level and 80% County Median Income.</p> <p>Work with Work2Future, local educational institutions, and other workforce development organizations to link them with energy efficiency-related workforce development opportunities.</p>
<p>3. Develop waste to energy technology infrastructure at the City's WPCP <i>(Zero Waste & Waste to Energy)</i></p>	<p>Collaborating with regional and state public partners as well as private planners and investors will provide the most efficient solution for waste diversion and energy production</p>	<p>Initiate process for procuring Waste to Energy (WTE) capacity on WPCP owned lands</p> <p>Status: Site feasibility and environmental assessment underway</p>	<p>Finalize site feasibility assessment</p> <p>Complete Environmental Review and permitting process</p> <p>Conclude lease negotiations</p>

Strategic Focus	Proposed Strategy	2009 Work Plan	2010 Work Plan
4. Execute an agreement with the Santa Clara Valley Water District for long-term development of recycled water use (<i>Recycle or Beneficially Reuse Wastewater</i>)	Develop and analyze alternative modes of collaboration; facilitate meetings with elected officials to review and approve selected alternatives	Enter into a long-term agreement to expand uses of recycled water Status: Negotiated agreement framework.	Council and Water Board approval of long-term recycled water agreement framework in Spring 2010.
5. Expand alternative fuel infrastructure (<i>100% Public Fleet on Alternative Fuels</i>)	Collaborate with other jurisdictions for regional compatibility	Develop regional standards and leverage procurement Status: Collaborating with local jurisdictions through Gov2Gov, the region has made strides in standardizing on EV charging system standards.	Collaborate with The ETDC and Gov2Gov in applying a diverse complement of EV vehicles and building a sustainable EV charging infrastructure throughout the City
6. Expand, maintain, and track new community forest tree plantings through partnerships with residents and community groups (<i>100,000 Trees & Zero Emission Lights</i>)	Develop partnerships with California Climate Action Registry to explore carbon offset program and develop system to comprehensively track net new trees planted.	Provide ongoing funding for City resources and to support partnerships. Expand tree planting program with the California Climate Action Registry and Our City Forest Status: After examination of Climate Action Registry program, it was determined that the City would not be able to participate due to commitment requirements and cost issues. Partnership with Our City Forest has been expanded to include using the AmeriCorps program for the street tree inventory project and preparation of the Community Forest Best Management Practices Manual. The iTree-Streets inventory completed in 2009 estimated that there are	Continue progress on finishing the complete street tree inventory effort. Seek grant funding and other necessary resources to finish the street tree inventory, prepare a Community Forest Master Plan, and fund additional tree planting projects in areas of the City deficient in adequate tree canopy.

Strategic Focus	Proposed Strategy	2009 Work Plan	2010 Work Plan
		242,650 street trees in San José and 87,580 vacant street tree planting sites.	
7. Power existing streetlights with renewable energy (<i>100,000 Trees & Zero Emission Lights</i>)	Partner with private entities to develop cost-effective method to adapt existing streetlights to capture and use renewable energy	Identify potential partners to prototype renewable energy systems. Status: A solar/wind LED streetlight donated to the City as part of the Green Vision education and demonstration project will be tested.	Develop a strategy to backfill City's streetlight energy requirements with renewable energy. Identify potential partners to demonstrate the viability of solar cooling stations to power streetlights.
8. Expand and maintain trail network through partnerships (<i>100 Miles of Interconnected Trails</i>)	Establish partnerships with non profits and private entities	Council adoption of volunteer policy. Increase miles adopted from 3.2 to 4.2 miles through Adopt a Trail program. Establish a Parks Foundation to support advocacy and fund raising for open space. Status: A total of 5.8 miles of trail are adopted. The Parks Foundation was established in Summer 2009.	Define and initiate a Trail Watch program, with volunteers trained specifically to report maintenance issues to Parks Staff to support more rapid and well-documented maintenance activities.

Communications and Engagement

Strategic Focus	Proposed Strategy	2009 Work Plan	2010 Work Plan
1. Implement community-wide energy efficiency programs (50% Energy Reduction)	<p>Implement the Strategic Energy Plan.</p> <p>Increase demand for energy efficiency and clean energy education and resources;</p> <p>Increase the number of local residents, agencies, and businesses who, by leading by example, become energy efficiency and clean energy “ambassadors.”</p>	<p>Council approved Strategic Energy Plan in June 2009.</p> <p>Status: Council approved Strategic Energy Plan in June 2009.</p> <p>Applied for funding to implement the Energy Plan. The City received \$10.8M in energy efficiency and solar implementation grants as a result. Many other grant applications are still being reviewed.</p> <p>Began implementation of priority recommendations within SEP.</p>	<p>Adoption of Strategic Energy Action Plan by Council in April 2010.</p> <p>Coordinate with regional efforts to obtain funding for Comprehensive Residential Retrofit Programs.</p> <p>Implement the Silicon Valley Energy Map</p>
2. Expand knowledge and awareness of renewable energy program resources (100% Clean, Renewable Electricity)	<p>Work in partnership with businesses and organizations throughout community</p>	<p>Increase awareness of San José residents and businesses about renewable energy with the goal of a 10% increase in number of San José residents and businesses receiving renewable energy services</p> <p>Status: Participated in a number of community events including National Night Out, held educational trainings for teachers and solar oven workshops for kids at libraries; provided over 15 solar education presentations to neighborhood associations and organized and participated in symposiums and summits on numerous solar related topics. Over</p>	<p>Conduct Green Vision Education and Demonstration Community Tours</p> <p>Hold Solar Block Parties to promote CaliforniaFIRST</p> <p>Hold ongoing community organization solar presentations</p> <p>Participate in conferences, symposiums and summits.</p> <p>Provide education to K-12 schools</p>

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		1500 community members were reached.	
3. Develop Green Building Policy for Renovations and Retrofits (<i>50 Million Sq. Ft. of Green Building</i>)	Target green building policy outreach for renovations and retrofits with a focus on environmental and economic benefits	Develop draft objectives and framework for policy by Summer, begin outreach efforts Fall Status: Draft objectives drafted Fall 2009. Additional research and outreach is required to develop an appropriate approach given the severe economic downturn.	Conduct additional research and outreach in Spring 2010. Develop policy for Council approval Fall 2010.
4. Promote green building for private sector new construction through staff interactions with the public (<i>50 Million Sq. Ft. of Green Building</i>)	Develop outreach materials to support Private Sector Green Building Policy for New Construction and showcase municipal facilities	Develop outreach material through City wide team. Status: Draft materials developed and outreach with City staff initiated.	Test materials through counter staff activity Finalize outreach materials after receiving feedback from counter staff testing.
5. Develop meaningful Performance Metrics (<i>Sustainable General Plan</i>)	Focused civic engagement with Task Force and community to identify specific Performance Metrics	Submit Land Use and Transportation scenarios to Council in April. Draft General Plan measures to be completed by late 2009. Status: Land Use scenarios submitted.	Complete Draft Goals, Policies, and Implementation Strategies for all General Plan topics, including measurable standards for sustainable development. Select preferred Land Use Scenario.