



CITY OF SAN JOSE
Green Vision
2010
Annual Report

Including Tips For
A Greener Community



Table of Contents

Executive Summary i-viii

Introduction 1

Strategic Framework..... 3

Climate Change 4

Clean Tech Jobs..... 6

Reduced Energy Use 13

Renewable Energy 20

Green Buildings..... 27

Zero Waste 32

Recycled Water 40

Sustainable Development..... 46

Clean Fleet Vehicles..... 50

Trees & Zero Emission Streetlights..... 56

Interconnected Trails 62

Urban Environmental Accords..... 66

Glossary..... 72

Appendix – Comprehensive Work Plan..... 74

Executive Summary

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

The overall financial outlook for the City and State continues to be dismal, however, 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, has helped advance many Green Vision initiatives. The Green Vision positions the City well to receive grant funds, and in fact, to date, San José has received over \$70 million in grant funding related to Green Vision projects.

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 **\$5.3 billion** in total **venture capital invested** in Clean Tech companies in Silicon Valley, with **\$1.2 billion** invested in **2010** alone
- San José **designated as an Innovation Hub** (iHub) by the State
- Energy efficiency measures implemented at City facilities, an estimated **\$1 million** in annual energy savings to date; approximately **\$750,000** deposited into the Energy Fund
- Over **2.4 MW** of solar installed on municipal facilities, almost **28 MW** of total solar installed in San José with highest number of installations in California
- Over **3.7 million** square feet of certified green buildings completed, **1.2 million** square feet of which is **municipal buildings**
- **74%** overall **diversion rate**, continued highest **multi-family diversion rate** in the country at over **80%**
- Construction started on the **Advanced Water Treatment Facility**, a partnership project with the Santa Clara Valley Water District. Grants received so far include over \$6.46 million for pipeline extensions and \$8.5 million towards construction of the Advanced Water Treatment Facility.
- Completed development of a full **Draft Plan** document which will allow completion of the Envision General Plan Update in 2011
- **42%** of City fleet on alternative fuel; **GHG emissions** reduced by **28%** compared to 2003 baseline
- Over **50%** of the **street tree inventory** completed with the help of grants, partnerships, and AmeriCorps volunteers
- National leader in **deploying “smart” LED streetlights** with adaptive controls

*City of San José Green Vision 2010 Annual Report
Executive Summary*

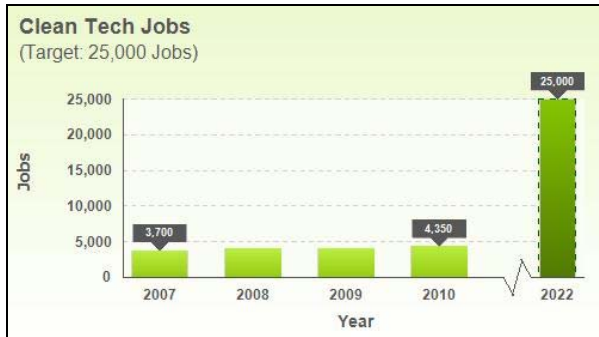
- In 2010, almost **\$3.9 million** in grant funding for on street bike and pedestrian improvements
- Trail Count survey indicated a **5.6%** increase in usage along downtown's Guadalupe River Trail; in the last four years U.S. Census indicated a **125%** increase in bike trips in San José, 50% above the national average
- A revamped and more interactive **Green Vision website** launched

Awards & Accolades

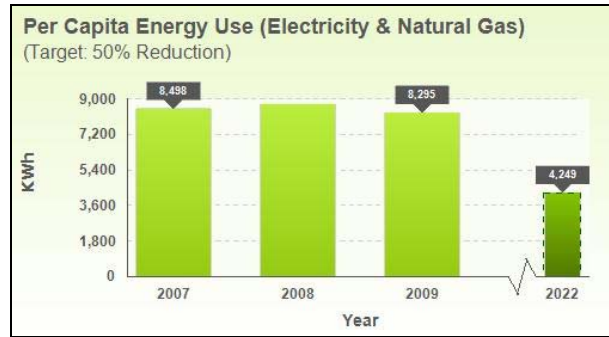
In 2010, environmental sustainability and climate change continued to be at the forefront of local and global initiatives. The City's Green Vision garnered numerous awards and accolades including:

- First Community Housing's Casa Feliz Studios of San José received the **2010 Governor's Environmental and Economic Leadership Award (GEELA)** for its Sustainable Facilities Program
- Roosevelt Community Center is San José first LEED-NC Gold project and the winner of **Environmental Design + Construction's Excellence in Design Award**
- Happy Hollow Park & Zoo (HHPZ) is the **nations' first amusement park and zoo to receive LEED certification** from the U.S. Green Building Council
- Acterra's **2010 Business Environmental Award** for San José's Solar America City Program
- Acterra's **2010 Business Environmental Award** for San José's Environmentally Preferable Procurement Policy
- U.S. Conference of Mayor's **City Livability Honorable Mention award** for the San José Green Vision program
- American Trails' **State-of-the-Art Technology Award** honored San José for the Trail Signage and Mileage Marker Guidelines and deployment
- The Federal Highway Administration, Federal Transit Administration and the American Planning Association honored San José with the **Transportation Planning Excellence Award** for San José's multi-faceted approach to trail development
- The California Trails and Greenways Conference honored San José with an **Award of Merit** for the Albertson Parkway project
- California Parks and Recreation Society honored San José with an **Award of Achievement** for Coyote Creek Trail (Tully Road to Los Lagos Golf Course)
- Forbes Magazine recognized San José as the **10th least stressful city**, with abundant access to nature noted as an important factor
- CNN Money recognized San José as the **7th best place for a healthy retirement**

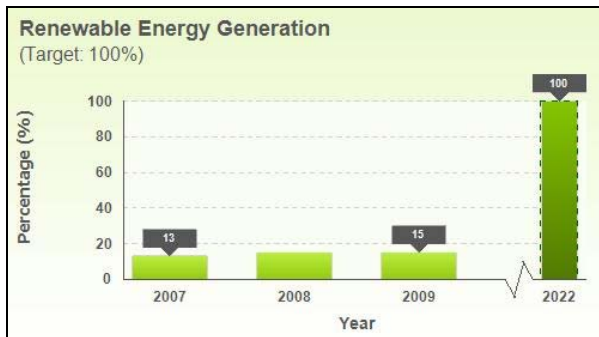
2010 Key Performance Metrics



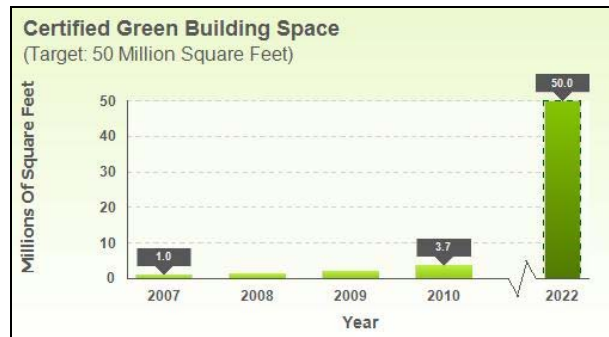
2009: 4,027 jobs



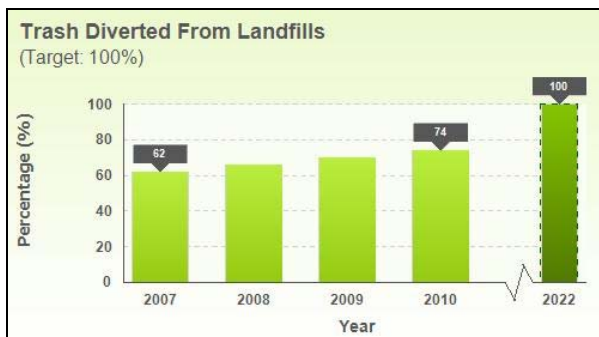
Per capita baseline figures have been adjusted to reflect service population numbers instead of only number of residents. This aligns with the methodology used for the General Plan update and captures energy use for both residents and employees in San José.



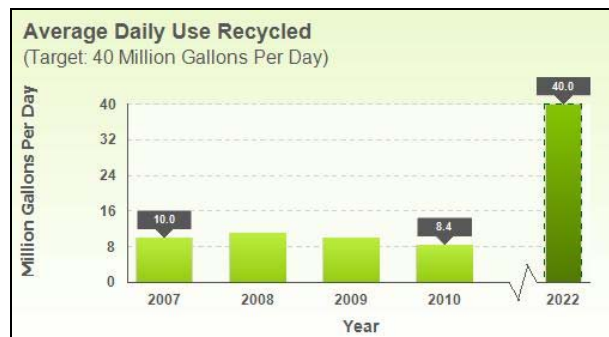
2007-2009 figures were updated to reflect final PG&E electricity usage data, PG&E power mix and electricity generated from known renewable sources (solar/biogas). 2010 electricity usage data is not available from PG&E until July 2011 and will be updated as those figures are available.



2009: 2.1 million square feet

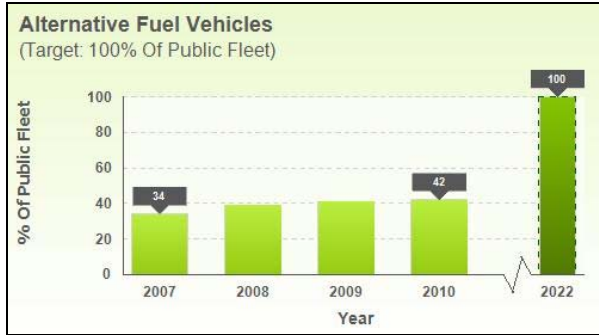


2009: 70 %. The original diversion rate of 62% shown for 2007 was the most recent (2004) diversion rate approved by CalRecycle. The updated diversion rates reflect data more recently approved by CalRecycle. 2010 data is still pending approval.

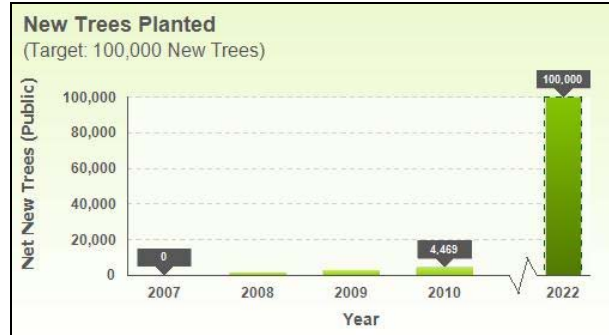


The 2010's reduction in recycled water use for irrigation and industrial uses is attributed to cooler temperatures, increased rainfall in 2010, and our current economic downturn and subsequent reduction in energy use.

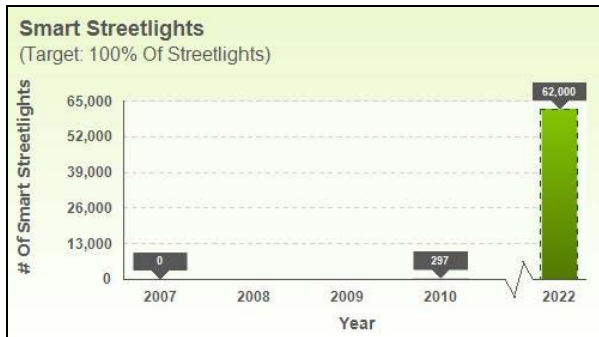
*City of San José Green Vision 2010 Annual Report
Executive Summary*



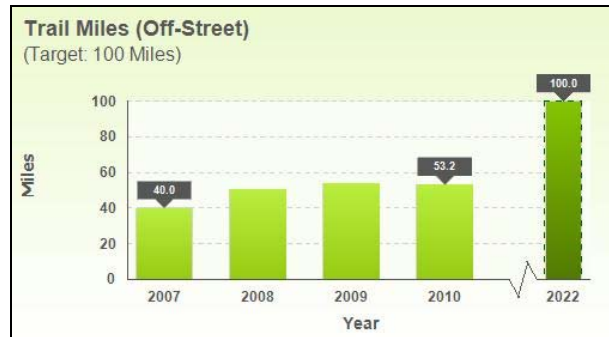
2009: 41% of the fleet ran on alternative fuels. 42% includes a 1.7% size reduction of the fleet under the Green Fleet Policy.



2009: 2,580 trees



2009: 125 smart streetlights



2009: 53.7 miles
Revised baseline and reduced mileage reflects updated trail inventory with more precise measurement of Coyote Creek Trail system.

2011 Work Plan and Priorities

Although the nation is slowly emerging from the recession, growth in most sectors continues to still be sluggish. An exception to this appears to be in the clean and green technology sector which has seen an 8% growth in the Bay Area. Thus, 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.

This report outlines a detailed 2011 Work Plan for all goals. As directed by Council in March 2009, the Work Plan has been developed with three screening criteria:

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

Key areas that support this work plan are outlined below:

Leading by Example

After nine consecutive years of deficits, the City is once again facing a projected budget shortfall of over \$100 million in FY 2011-2012 and balancing the budget will necessitate even more difficult decisions than FY 2010-2011. While maintaining focus on “green” programs and policies remains a challenge, the fiscal situation has also afforded us the opportunity to innovate and forge ahead with investments and policies that result in long term fiscally sustainable initiatives.

Leveraging the use of grants or other non General Fund dollars, several City facility energy-efficiency retrofits and some solar installations were completed in 2010. These projects are anticipated to result in an annual savings of approximately \$150,000. Total estimated energy savings to date are anticipated to be about \$1 million. Approximately \$750,000 of the total savings have been deposited into the City’s Energy Fund to fund more energy efficiency and renewable energy projects.

2011 Work Plan Priorities:

- Deploy demonstration projects to support commercialization of clean technologies; identify green employment trends and opportunities and support the greening of small businesses
- Reduce municipal energy use by an additional 5%; bring recommendations to Council for solar at the Water Pollution Control Plant and several City facilities
- Certify four buildings under LEED-EB Portfolio program; evaluate certification of additional existing facilities
- Restructure the City’s garbage collection system for businesses and bring recommendation to Council on new haulers; advance litter reduction plan to Council; launch Green Star School certification program; educate and assist event organizers to develop zero waste events; maximize diversion and safe disposal opportunities for residents, including advancing the Environmental Innovation Center
- Work with stakeholders to develop an ordinance for indoor use of recycled water
- Advance General Plan Update for Council consideration and adoption
- Evaluate fuel efficient patrol vehicles, develop updated procurement specifications for the new vehicle standard
- Advance Streetlight design guides and private development outdoor lighting policy for Council consideration and adoption; install 2,200 LED streetlights over the next two years
- Expand the City’s bike network by 10 miles, install 500 public bike parking spaces

Advocacy

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 support Green Vision implementation and clean tech job growth in the region.

2011 Work Plan Priorities:

- Partner with industry leaders and regional advocacy groups on Clean Tech Legislative Agenda
- Advocate for renewal of CSI incentives; support state legislation to expand energy choices for communities; partner with local, regional and state agencies to develop and implement Energy Upgrade California
- Reach resolution with PG&E on rates to reflect energy savings due to adaptive lighting

Financing Mechanisms

As the City's available funding for various Green Vision initiatives continues to be limited at best, exploring alternate financing mechanisms such as grants, modified fee structures, and improvement districts remains critical to the success of advancing the Green Vision. For grant applications to truly be a high priority, planning for adequate staffing resources and local funding matches will be essential.

Green Vision projects with grant funding, from the Federal Recovery Act and other State sources, continued to be a focus in 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 started 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: <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.

2011 Work Plan Priorities:

- Use Federal, State and PG&E funding to expand energy efficiency education, audits and improvements in the community
- Pursue New Market Tax Credits to finance Environmental Innovation Center
- Pursue grants to advance workplan elements on all goals

Strategic Partnerships

There was a strong focus on partnerships in 2010. In February 2010, the City issued a Request for Interest for partnerships that would advance any of the Green Vision goals. A total of 44 proposals were received. Some of these proposals have already led to important strategic partnerships such as the one with Harvest Power to conduct a gasification feasibility study which helped the City garner a grant for \$1.9 million, while others are being evaluated for further study such as the one with Armageddon Energy for a solar technology installation on a City facility. Staff has also partnered with Coulumb Technologies and the ChargePoint America program on electric vehicle charging infrastructure which has led to San José receiving 55 charging stations. San José is also partnering with the Lawrence Berkeley National Labs, Energy Efficiency Technology Division, to form a research development and demonstration pilot around cool technologies (roofing materials, pavement applications and urban vegetation approaches).

2011 Work Plan Priorities:

- Partner with National Labs on clean tech deployment strategies

*City of San José Green Vision 2010 Annual Report
Executive Summary*

- Partner with Zero Waste to begin construction of anaerobic digestion facility at 9 Par; partner with Harvest Power to conduct feasibility study of gasification pilot
- Partner with SCVWD to develop O&M agreement for Advanced Water Treatment Plant; work with public and private entities, including private water utilities, to expand recycled water infrastructure and use
- Continue to advocate and partner on regional planning initiatives
- Collaborate with regional partners on grant opportunities for a Car Share program and expansion of electric vehicle infrastructure
- Continue to partner with downtown businesses on tree pilot program; partner with Lawrence Berkeley National Labs on a Cool Cities pilot
- Implement a trail Watch program through the use of volunteers
- Continue to look for partnership opportunities to advance workplan elements for all goals

Communications and Engagement

Marketing and communication expenditures are severely restricted given the City's challenging budget situation; yet, in order for most of the Green Vision goals to be realized, community engagement and participation is critical. Staff has been leveraging grant funds and other external partners to engage City employees as well as the larger community.

The San José Green Vision Resource Team – a joint collaboration with the Bay Area Air Quality Management District to promote the Green Vision. In 2010, the San José Green Vision Resource Team with Sacred Heart Community Services, sponsored several energy efficiency workshops in English and Spanish for low-income residents.

City Green Team – this team has 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 reducing City operating costs.

Earth Day – Leveraging DOE grant funds and sponsorships, staff is currently planning a 2011 Earth Day event at San José City Hall. This event is an opportunity to celebrate the Green Vision's achievements, promote current programs, and outreach to City employees, general public, and downtown residents and businesses. Activities will include interactive workshops and tours of the Clean Energy Showcase.

Constituent Engagement – Staff will also be working with individual Council districts to leverage their outreach efforts and engage constituents in energy efficiency and renewable energy activities.

New Green Vision Website and Newsletter – In 2010, San José completed a request for proposals to provide a Content Management System (CMS) solution and redesign the City's Green Vision website. The CMS platform and database allows staff from multiple departments to easily manage and display the progress of the Green Vision performance metrics. The new website debuted at the International City/County Management Association (ICMA) conference that was hosted by San José in October 2010. Staff is continuing to develop and improve online tools integrated into the website including an electronic newsletter, an online survey tool, and a calendar of events. To increase community engagement and interest, the website also includes a

*City of San José Green Vision 2010 Annual Report
Executive Summary*

community stories page where residents and businesses can submit their stories of how they are furthering the Green Vision in their community. Please visit: www.sanjoseca.gov/greenvision.

2011 Work Plan Priorities:

- Series of educational outreach activities in summer 2011 focused on energy efficiency and renewable energy
- Engage stakeholders to explore green building options for renovations and retrofits policy
- Continue to use the Green Vision website to engage the community through newsletters and success stories.

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 with ten ambitious goals for economic growth, environmental sustainability and an enhanced quality of life for San José's residents and businesses. Through the Green Vision, San José is modeling the way for others by fostering 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.



San José, CA

Successful realization of the Green Vision will require capitalizing on the innovation of Silicon Valley and fostering the development of emerging technologies that are poised to become the driving industries of the future.

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

The City of San José has been facing budget deficits for ten consecutive years, with the recent recession only further exacerbating the budget challenges. Although the Green Vision is a high priority for the City, the resources and funding available have been limited at best. In early 2010, Council directed staff to focus on strategic partnerships and leverage outside resources to help advance the Green Vision. Staff has done a tremendous job of following through on this direction and 2010 has seen a significant influx of grant funding as well as some key partnerships that have helped us make substantial progress on the Green Vision goals.

In 2010, the City in partnership with regional agencies, nonprofit organizations, and businesses successfully pursued grant funding to support various Green Vision projects, including funding to develop two energy efficiency innovation pilots, installation and purchase of electric vehicle charging stations, and construction of the Advanced Water Treatment Facility (AWT). Additionally, other local, state and federal grant funding sources for streetlights, trails, and trees, continue to be actively pursued. To date, San José has received over \$70 million in grant funding related to Green Vision projects. This was largely due to a large influx of Federal and State dollars, however, these funding streams may be drying up in the future. Staff is thus also continuing to explore other financing mechanisms such as modified fee structures, new market tax credits, and improvement districts.

Partnerships: The City's innovative Demonstration Partnership policy provides an excellent framework for forming strategic partnerships with public and private entities on several Green Vision goals. In February 2010, the City issued a Request for Interest for partnerships that would advance any of the Green Vision goals. A total of 44 proposals were received for projects spanning several areas such as renewable energy, waste to energy, water, and advanced building energy efficiency technologies. Some of these proposals have already led to important strategic partnerships such as the one with Harvest Power to conduct a gasification feasibility study which helped the City garner a grant for \$1.9 million, while others are being evaluated for further study such as the one with Armageddon Energy for a solar technology installation on a City facility.

In addition to this, the City has entered into several partnerships with public and private entities to advance energy efficiency, renewable energy, and electric vehicle infrastructure.

This report provides information on key 2010 Green Vision accomplishments along with the diverse challenges and strategic direction needed for realizing the long-term vision. The report also includes a proposed 2011 Work Plan.

Strategic Framework

The 2011 Work Plan (see Appendix) outlines focus areas for each goal within a strategic framework. As directed by Council in March 2009, the Green Vision Work Plan continues to use three major 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?



San José Council Chambers

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 the 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
- ***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
- ***Financing mechanisms*** – Exploring new financing mechanisms such as grants, modified fee structures, and improvement districts, to supplement City dollars
- ***Forming strategic partnerships*** – Partnering with other entities, such as schools, universities, non-profits, and private corporations, to work towards common goals
- ***Communications and engagement*** – Communicating with key audiences to bring about awareness, acceptance, and action on all of the goals

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 the Annual Report and the Green Vision website www.sanjoseca.gov/greenvision which provides 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.

Greenhouse Gas Emissions

The State of California began addressing greenhouse gas emissions as a first step to addressing climate change in the mid-2000s with executive orders, legislation, and administrative regulations. Greenhouse gas reduction, often measured as carbon dioxide equivalents (CO₂e) has become integrated into every aspect of environmental protection. The state has enacted early reduction strategies mainly focused on energy producers and refineries along with improving fuel economy and emission standards for vehicles. Local governments were not required to reduce a specific amount of greenhouse gases but were strongly urged to do their part and reduce 15% below 2005 baseline levels. San José did not need to implement new strategies to reduce greenhouse gases because sustainable City actions have been underway for decades. San José has had water conservation and recycling, solid waste reduction, along with award winning energy efficiency and alternative energy programs that have effectively reduced greenhouse gas emissions or at the very least, slowed the rate of increase. Policies such as the Green Fleet and Environmentally Preferred Procurement policies were established primarily to reduce operating costs by saving energy and fuel but they also reduce greenhouse gas emissions. San José has proposed aggressive greenhouse gas reductions and continues to track progress on reaching the goal. Success of the Green Vision goals is integral in achieving the reduction goals.



Climate Action Plan / Greenhouse Gas Reduction Strategy

Urban planning design is one of the most important tools in the battle against climate change impacts. Sustainable actions like those captured in the Green Vision Goals as well as other specific policies noted in the Envision San José 2040 General Plan update will help reduce GHG emissions, however these actions alone will not stop climate change. The severity of weather impacts are already being realized such as increased winter and spring flooding, heat waves, and droughts. Climate change will only increase these environmental impacts and thoughtful urban planning helps build resiliency to adapt to existing and future climate risks. The measurable standards in the General Plan will help create a risk-based response to climate change that is data driven and economically sound. Planning for climate change now as new, high density development occurs is much less expensive than replacing critical infrastructure, businesses and homes after a catastrophe like flooding.

Key elements of urban planning that reduce GHG emissions more directly are building mixed-use housing or “villages” that minimize car travel; building site location that optimizes solar installation potential – either for heating water or for electricity generation; planting trees to help mitigate heat island effects; providing access to safe, pedestrian friendly sidewalks, trails and bike paths, as well as mass transit. Greenhouse gas emissions are measured by other Green Vision goals and are not duplicated here.

A Greenhouse Gas Reduction Strategy is being developed in tandem with the General Plan Update process and will put forth a road map to reduce greenhouse gas emissions, including those related to transportation. The Greenhouse Gas Reduction strategy is expected to be proposed to City Council for approval in March 2012 and the first annual status update of these GHG emission reduction strategies will be presented to Council in March 2013.

Interim Green Vision Greenhouse Gas Reporting

The current methodology used to track GHG emission is tied to specific goals. Energy use data is derived from verified PG&E data for San José. The recycled water data is derived from the annual amount of recycled water delivered to customers as well as from water conservation values which are calculated based on the types of fixtures installed over the year. Conversion factors for water delivery to estimate the amount of energy required to deliver water was taken from the Santa Clara Valley Water District’s *From Watts to Water, Table 2 - energy factors*. All energy data is converted to GHG emissions using the 2009 ICLEI Clean Air and Climate Protection Software using CARB CEC California grid average coefficients. This software is also used for solid waste calculations. Per capita values reflect the service population of San José and include residents and jobs. Using service population is more reflective of energy use within the City of San José and is consistent with methodologies used in the Envision San José 2040 General Plan development. Municipal vehicle GHG emissions were calculated using an EPA factor and fuel usage which is consistent with past use of the ICLEI software. Bikes, trails and trees related emission reductions are derived using EPA methodologies to estimate GHG emissions saved or sequestered.

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

Clean Tech entrepreneurs, companies, and universities are developing technologies that will change the world and create economic opportunities for generations to come. The City's Clean Tech Strategy provides leadership for the long-term economic success of this emerging industry sector and is an integral component of the Green Vision.



National Renewable Energy Laboratory, the Wind to Hydrogen (Wind2H2) Project

Achievements & Successes

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.

Clean Tech Jobs: 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 higher job growth compared to other sectors. The core green economy in California expanded 3% while the Bay Area grew at 8% far outpacing the economy as a whole. The Bay Area represents 28% of the employment and 26% of businesses in California's growing green economy. The same holds true for San José; despite a 2010 unemployment rate of 11.4% that has outpaced California and the rest of the United States. There are 4,350¹ 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. Manufacturing employment represents 26% of all employment in California's core green economy, but only 11% of the economy as a whole. Support infrastructure for design and manufacturing in the emerging green economy are critical to the success of growth in the clean tech sector and an area of great strength for San José. Data gathering and better understanding of the transactions of employers in the contract manufacturing, applied research and testing services, and engineering and design firms is important to supporting growth in the core green economy.

Venture Capital Investment: Silicon Valley is known worldwide for its concentration of Venture Capital (VC) firms representing the lifeline of the state's green investment activity. VC investment in clean technology in Silicon Valley was \$1.2 billion in 2010, and totaled over \$5 billion for the last four years – far outpacing other regions in the world. San José companies are actively engaged with the angel and VC networks to secure financing, with the award-winning

¹ A recent study led by work2future and NOVA, *Emerging Industry and Technology Sectors in Silicon Valley's Green Economy*, used a slightly different methodology to understand workforce trends and found clean tech jobs total to over 5,000 jobs.

Environmental Business Cluster routinely convening investors to facilitate interaction between emerging green companies and potential financiers.

Clean Tech Companies: San José's list of Clean Tech companies at all stages of maturity continues to grow as Sunpower, BioFuelBox, Borgata, Echelon, Solexant, SolarJunction, SoloPower, Stion, Nanosolar, SunWize, Wrightspeed, Chromasun, and Teos, are joined by household names like Cisco and IBM who are also now investing and innovating in the clean tech arena. A support network of world-class incubators, proximity to top-flight research institutions and National Laboratories, a concentration of existing high-tech companies seeking new ventures, a strong finance network, and a range of manufacturing assets in San José creates fertile ground for innovation in clean tech.



National Renewable Energy Laboratory,
Silicon cluster tool at the Process
Development and Integration Laboratory

Clean Tech 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 and San José has partnered with them along the way. San José supported the CTO this year by hosting the inaugural Clean Tech Open Conference and CTO Awards Gala in Downtown San José. San José supports these emerging green companies ranging from site selection, permitting assistance, grant support, exploration of field trials, and networking in Silicon Valley – a critically important piece for start-ups. In 2010, Teos a next generation Light Emitting Diode (LED) lighting company, and Wrightspeed, a hybrid digital drive system technology landed in North San José occupying over 60,000 square feet. Reelsolar, Armaggedon, Chromasun are among the many clean tech start-ups that are poised to grow in San José.

SUNPOWER

SunPower announced it will relocate its headquarters in San José to an existing North San José campus of 165,000 square feet to accommodate planned long-term growth. The City is facilitating the expansion effort with permitting support, support on application for State Bond Issuance of \$30M, workforce assistance and utility and sales tax reimbursements. Sunpower leads the world in the development of high efficiency solar panels - the company has incubated and grown successfully in San José and seeks to continue to grow in San José.

Commercialization Partnerships: Demonstration of emerging technologies is critical to proving concept, attracting capital and scaling quickly – and the City of San José is committed to using its lands, buildings and processes as a test-bed to support these commercialization efforts. In 2010, San José released a first of its kind Request for Information (RFI) for demonstration partnerships attracting nearly 50 responses including solar, waste to energy and advanced building energy efficiency technologies. Other partnership efforts include the Lawrence Berkeley National Labs Energy Efficiency Technology Division research development and demonstration pilot for cool technologies (roofing materials, pavement applications and urban vegetation approaches), and the City application to the Economic Development Agency (EDA) for funding to establish a Clean Tech Demonstration Center 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. The EDA request has been advanced to Washington D.C. from the regional office and is awaiting approval and budget authorization.

San José/Silicon Valley Emerging Technology iHub Designation: The City was designated as an Innovation Hub (iHub) 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 iHub consortium brings together an impressive list of founding contributors including but not limited to: San José State University, UC Santa Cruz, Stanford University Office of Technology Licensing, Joint Venture-Silicon Valley Network, San José Silicon Valley Chamber of Commerce, work2future, BusinessOwnerSpace.com, San José State University Foundation, the Environmental Business Cluster and others. The designation anticipates federal interest and funding for innovation clusters in the Economic Development Administration budget.

Foreign Investment: 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.

City of Osaka Clean Tech Delegation Visit – The cities of San José and Osaka hosted, “Opportunities for Clean Tech Innovation Partnerships,” a seminar focusing on clean technology innovation collaborations at San José City Hall. The gathering focused on potential partnerships among companies in Osaka and San José and potential opportunities to create successful partnerships in the global market.

Targeting Direct Investment – Through a partnership with OCO Global, the Office of Economic Development has engaged in targeting foreign direct investment in San José. 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 had the opportunity to work with 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.

Grants: The City has also been able to leverage Community Development Block Grant (CDBG) funds to support Clean Tech companies in San José. \$1.2 million in Recovery Act Clean Tech Careers funds have been targeted to existing companies in San José or those relocating to San José that are considered to be driving or business serving industries that focus on creating energy efficient products. To date the City has executed 3 grant agreements totaling \$705,000 with the following companies: Intermolecular, SoloPower and Green Earth Management. The desired outcome for the Clean Tech Career fund is to provide opportunities to individuals most impacted by the recession due job loss and provide investment capital necessary to increase economic and energy efficiency by creating or implementing new and emerging technology which results in long-term economic



ChargePoint Electric Vehicle Charging Station

benefit to the company. Of the combined 24 jobs anticipated to be created, Intermolecular has filled 8 positions with low-to-moderate income San José residents. In addition the City is currently in negotiations with a company for the remaining funds available and it is anticipated that an additional 15 jobs will be created bringing the total jobs created to 39.

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. As a recipient of nearly \$13 million of Recovery Act 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 successfully launched its pilot 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. Work2future will continue to develop this program further with two new cohorts of participants starting in 2011. Additionally, Local workforce investment boards and City staff partnered on Silicon Valley Emerging Green Study to understand green employment trends, and assess and forecast opportunities associated with the green economy. The report will be circulated in early 2011 to partners around the valley and offers recommendations to support the emerging green economy moving forward.



Chromasun, located north of downtown San José, is developing and manufacturing the next generation of commercial/ industrial sized solar collectors for building energy needs. The company's vision is to harvest solar energy for air-conditioning, power, process heat, and lighting – right on the roof. Chromasun is a participant of the San José Green Vision Clean Energy Showcase.

Leadership/Communication Strategy: Sharing our approach and lessons learned, and growing a collaborative network are vital pieces of the Green Vision that cut across all of the goals. The City's efforts and message around the Green Vision as a coordinated sustainability and economic development platform are important and court business landing opportunities in multiple ways and forums. Staff presented on San José's efforts in a range of forums and audiences in 2010 including but not limited to: West Coast Green, Connectivity Week, CleanStart, and hosted delegation visits from Belgium, Japan, Mexico and China among others.

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. 2010 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; and urging support and

expedited review for a range of Federal and State applications for funding. In 2010, the City of San José also actively participated in the passage and rule making of Senate Bill 71 which provides sales and use tax exclusions for the purchase of clean tech manufacturing equipment in California. Of the total \$785 million granted in tax exclusions, almost \$342 million went to companies in Santa Clara County. Additionally, of the total 471 jobs created as a result of SB 71, 42% of the jobs were in Santa Clara County with 58% in the rest of California.



Governor Schwarzenegger and Mayor Reed visited Nanosolar's headquarters in San Jose, CA to sign SB 71 into law, a bill to create a sales tax exemption for the purchase of green tech manufacturing equipment in California.

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 2011 will include: implementation of Clean Tech Legislative Agenda, deployment of demonstration projects, creation and enhancement of strategic clean tech partnerships, work with regional consortiums to create and support regional deployment models, continued support for emerging clean tech companies 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 and partnership with industries to identify existing and future workforce demands.

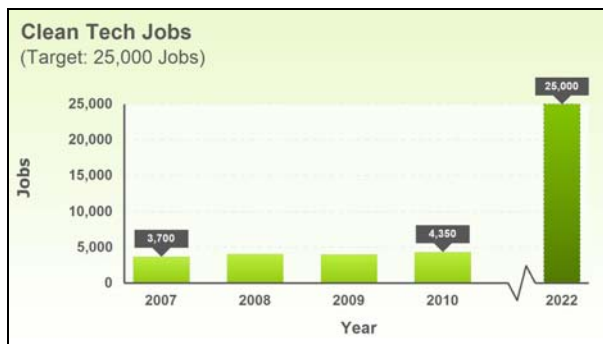
Work Plan

Strategic Focus	Proposed Strategy	2010 Work Plan	2011 Work Plan
Lead 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.	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. Status: Economic Development Strategy Update completed, General Plan Update and WPCP Master Plan in progress.	Develop and use data and analysis to identify industry clusters, target policy, and track performance.
Demonstrate clean transportation, renewable energy, smart grid and	Pursue increased flexibility in implementing demonstration policy to allow for more	Deploy demonstration projects in City owned buildings and land to support commercialization of clean technologies.	Deploy demonstration projects on City owned buildings and land, and community-wide to support commercialization of clean

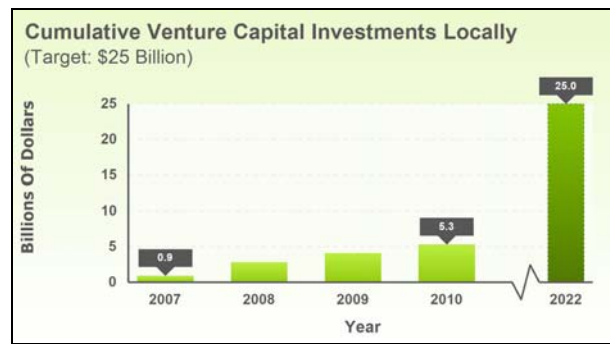
Strategic Focus	Proposed Strategy	2010 Work Plan	2011 Work Plan
energy efficiency.	clean technologies deployed in San José facilities.	Status: Ongoing.	technologies.
Greening of small businesses through BusinessOwners Space.com.	Launch resources to support greening of small businesses.	Develop a new Green Resource page on BusinessOwnerSpace.com. Status: Ongoing.	Develop an outreach strategy within the BusinessOwnerSpace partner network to implement Green Resource tool.
Identify green employment trends and opportunities.	Develop Silicon Valley Emerging Green Study – San José in partnership with work2future and NOVA.		Complete and publish a study of workforce development needs and opportunities in emerging sectors of the Silicon Valley green economy.
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.	Ongoing efforts to support Clean Tech Agenda. Status: SB 71 passed.	Partner with clean tech industry, and regional advocacy groups to develop Clean Tech Legislative Agenda for Silicon Valley.
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.	Apply for grants at the federal and state level to support clean technology sector. Status: EDA and E-RIC grants completed.	Continued efforts to access resources to support clean tech industry.
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.	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	Continue to partner with workforce training providers to develop clean tech training opportunities.

Strategic Focus	Proposed Strategy	2010 Work Plan	2011 Work Plan
		<p>2010 enrollment goal is 100+ participants, at a minimum of 15 trainees per course.</p> <p>Status: In 2010, in total 188 participants completed a workforce training program related to clean tech jobs.</p>	
Formation of National Labs Partnership focused on clean technology deployment strategies.	Connect Green Vision platform to nationally significant research teams and R&D resources, and commercialization support.		Scope cool technology partnership and form industrial partnerships to support effort.

Performance Metrics



2009: 4,027 jobs



2009: \$4.1 Billion



2009: 410 participants



2009: 68 companies

Reduce Per Capita Energy Use by 50%

Energy powers our lives. We depend on it to run our homes and businesses. To reach its energy reduction goals, San José needs the participation and support of everyone in the community.

Achievements & Successes

City Energy Fund: In calendar year 2010, \$90,000 in first year project cost savings transfers and \$60,000 in rebates/incentives were deposited into the Energy Fund for use in future energy efficiency projects. Since its inception, over \$530,000 in rebates/incentives and \$235,000 in project cost savings transfers have been deposited into the Energy Fund.



With the assistance of funding provided from the City Energy Fund, lighting retrofits were completed at five fire stations in 2010, including Fire Station #29 (pictured above). In addition to saving over 119,000 kWh of energy per year, these fire station lighting projects will return nearly \$20,000 per year for two years to the Energy Fund for use in additional energy efficiency work at municipal sites.

Energy Efficiency and Conservation Block Grant (EECBG): In December 2009, the grant agreement between the City of San José and the Department of Energy for a \$8.8M allocation under the Energy Efficiency and Conservation Block Grant program was approved. Of those funds, the Council approved an allocation for the following program activities over the three year term of the agreement:

- \$4.5 M for City facility energy efficiency projects
- \$2.0 M for Light Emitting Diode (LED) streetlights
- \$2.3 M for the development of solar projects on City facilities

The Environmental Services Department has overall management for this program, working in close collaboration with several departments throughout the City. The program is on target to meet both the City's and DOE's goals of reduced energy use, increased use of clean technology, and the increased use of solar on City facilities. Additional details on the achievements of each program area are provided in the Work Plan section.

Strategic Energy Plan: In May 2010, Council adopted the Strategic Energy Action Plan, which focuses on achieving the Green Vision energy goals – 50% reduction in energy use and receiving 100% of the City's electricity needs from renewables.

Community Energy Efficiency: Regional coordination is an important element in achieving energy reductions at the community level. The City has received contract

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: <http://energy.sanjoseca.gov/>.
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.

funding and grants for the following community programs:

- Silicon Valley Energy Watch
- Better Buildings Program
- Innovation Pilots: Community Energy Champions Grants Program and the Municipal Whole House Rehabilitation Pilot

Silicon Valley Energy Watch – The 2010-2012 Silicon Valley Energy Watch (Energy Watch) program continues to focus on energy efficiency services, education, and outreach throughout Santa Clara County, particularly focused in the following four areas:

- Education, Outreach, and Policy Coordination
- Small Business Energy Savings
- Municipal and Non Profit Energy Savings
- Low and Moderate Income Residential Energy Savings

On Earth Day, 2010, the Energy Watch program launched the Silicon Valley Energy Map (Energy Map), a database driven online map that displays energy use, efficiency projects, green buildings, and solar installations. The Energy Map is freely available to the public as an outreach, education, and marketing tool. Members of the public are invited to submit testimonials of their energy efficiency projects, green buildings, and solar installations for inclusion on the map. To learn more, please visit: <http://www.svenergymap.org/>.

In 2010, the Energy Watch Program also expanded the Kill A Watt™ Library Lending Program, which lends Kill A Watt™ EZ energy meters for up to three weeks at no charge, from all libraries throughout the County. Kill A Watt™ EZ energy meters are designed to easily measure how much electricity is used by plug-in appliances at home or at work. The program has been a resounding success, with meters on hold at many branches due to high demand.

Better Buildings Program – As part of the Better Buildings Program, funded by the Recovery Act, the City is partnering with four regions throughout the state (San Francisco, Sonoma County, Alameda County, Sacramento, and Los Angeles County) to pilot innovative ways of deploying energy efficiency programming to target communities. Two east San José neighborhoods will be the site of a “Whole Neighborhood” pilot through this program, receiving intensive outreach, training and microfinancing referrals for building performance contractors, program integration activities, and market transformation analysis. The City is partnering with San José State University and the Opportunity Fund to implement this program.

The San José Green Vision Resource Team is a joint collaboration between the Bay Area Air Quality Management District and the City of San José to promote the Green Vision and actions to reduce air pollution in San José. Resource teams are voluntary groups of key opinion leaders from government, business, environmental and civic organizations that pool financial and time resources to implement air pollution reduction projects. The Air District supplies each team with a modest budget, a facilitator to run meetings and assist with implementation as well as offering staff support from the District. In 2010 the Resource Team sponsored energy savings workshops offered in both English and Spanish for low-income residents in collaboration with Sacred Heart Community Services. To learn more, please visit: <http://www.baaqmd.gov/>



Kill-A-Watt

Innovation Pilots – The City was also awarded over \$900,000 in additional funds from PG&E through a competitive process to enhance the City’s Energy Watch program with two new pilot programs. The first of these is the Community Energy Champions Grants Program, which will provide grants for targeted, community-based, innovative outreach energy efficiency programs. A total of \$350,000 will be awarded to eligible non profit organizations and local government agencies. Through staff trainings and marketing support, the program will build capacity within funded organizations to conduct effective sustainability outreach. The second pilot, coordinated with the City of San José’s Housing Rehabilitation Program, will enable over 70 homes already receiving “life, health, and safety” services to also receive comprehensive, performance-based energy efficiency retrofits. Staff will conduct analyses and develop standard templates for incorporating energy efficiency into common housing types. This program also includes training for municipal housing inspectors throughout Santa Clara County in home performance retrofits and inspection approaches conducive to Energy Upgrade California.

Regional Energy Efficiency Program

Coordination: The City of San José plays a key role in regional energy efficiency program coordination and piloting innovative outreach and delivery models. The City continues ongoing coordination with Santa Clara County in their role as County administrator for the new statewide Energy Upgrade California (EUC) program. EUC will streamline energy rebates, incentives, information, and workforce standards throughout the state. Customers will be able to access all information and resources in one central online portal for any energy efficiency project, including utility programs, and state and federal incentives. Santa Clara County is one of several counties to receive additional resources through EUC, including contractor training scholarships and a local web portal.



Project Details:

- Kwh saved - 19,948
- Kw saved - 7.507
- Annual \$ savings - \$3,199.75
- Cost of Project - \$5,501.62
- Rebate - \$2,963.63
- Contractor/Installer - Lumenature Technologies
- Technologies Installed - 800 Series T8 Lamps, Ultra Efficient Electronic Ballasts, Compact Fluorescents, and Halogen Infrared Lamps.

St. Stephen’s Episcopal Church is 33 years old. Over that time there have been many substitutions of lights and lamp assemblies both inside and outside. Efforts to reduce energy consumption have also provided a uniform lighting and physical appearance both inside and outside. Along with the strategy of dimming lights, staff has also ensured that there was sufficient lighting in open public areas. Staff and the congregation are very happy with the results of this energy reduction effort. Staff particularly appreciate that their input was recognized during follow up and that everything was done to their satisfaction. St. Stephen’s could not afford to do this re-work project without the financial help and technical support that was provided through the RightLights/Silicon Valley Energy Watch program.

- Reverend Ken Wratten

The Silicon Valley Energy Watch program is a joint project of the City of San José and Pacific Gas and Electric Company, providing energy efficiency education, outreach, retrofit services, and policy coordination to all of Santa Clara County. The program supports the City’s Green Vision, as well as numerous regional energy efficiency market transformation goals and activities. To learn more, please visit: <http://energy.sanJoseca.gov/energy-efficiency/>.

Legislation

Community Choice Aggregation (CCA), granted by the California Public Utilities Commission (CPUC) and as defined by State legislation (AB 117), permits any local government entity to aggregate the buying power of individual customers within a defined jurisdiction in order to secure alternative energy supply contracts. In January 2010, PG&E placed an initiative called the “Taxpayers Right to Vote” Act on the June 2010 ballot. This initiative would have required local governments to get two thirds approval from the taxpayers for any CCA projects. This would have directly impacted their ability to establish CCA districts and would have hindered the realization of renewable energy goals at the local level. San José advocated against this initiative, which was ultimately defeated by the voters.

Strategic Direction

Reducing energy use per capita by 50% throughout the City will require participation and support of everyone in the community. In 2011, in addition to substantive work on municipal energy efficiency, there will be a strong focus on outreach for residential energy efficiency programs in moderate income neighborhoods. By partnering with PG&E, Santa Clara County, regional partners, and local community agencies, San José will be able to make significant progress in implementing the Strategic Energy Action Plan and achieving its Green Vision goals.

Climate Change

San José is focusing on reducing energy use through conservation efforts as well as supply-side strategies that lower greenhouse gas (GHG) emissions associated with electricity generation overall. Energy efficiency will be California’s most effective tool for achieving GHG reductions in key industries as well as local governments like San José, which have also made strong commitments to renewable energy. Since energy data used to calculate energy goals comes from PG&E and verified 2010 data is not available until mid 2011; 2010 will be calculated and reported next year. Approximately 4,970,585 metric tons (MT) of CO₂ equivalents were emitted based on electricity and natural gas use in 2009. Per Capita Service Population Energy Use was 3.59 MT of CO₂ equivalents.

Work Plan

Strategic Focus	Proposed Strategy	2010 Work Plan	2011 Work Plan
Lead 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. Use federal and other financing sources for	Complete 35 energy audits and related energy efficiency projects. Reduce municipal energy use by 5%. Status: Completed 22 energy audits and 20	Complete 35 energy-efficiency projects. Reduce municipal energy use by 5% from previous year.

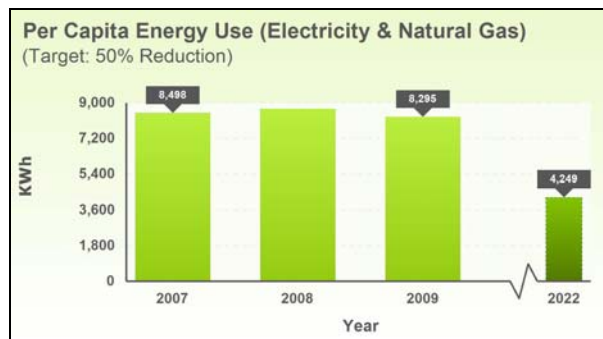
Strategic Focus	Proposed Strategy	2010 Work Plan	2011 Work Plan
	energy efficiency installations.	energy efficiency projects. Reduced municipal energy use by 10% from previous year. ²	
Advocating Policies			
Identify & remove barriers to creating energy improvement areas and smart grids.	<p>Work with PG&E, CEC and CPUC to advance use of energy areas or smart grids.</p> <p>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.</p>	<p>Support state legislation to enable cities and companies to effectively offer community choices including microgrids and energy improvement districts.</p> <p>Launch the CaliforniaFirst program with outreach to residents and businesses.</p> <p>Pursue funding opportunities.</p> <p>Status: Residential PACE programs were cancelled as a result of federal concerns regarding priority lein rankings. The City and its partners, as well as statewide working groups, are currently developing alternative financing mechanisms.</p>	<p>Support state legislation to enable cities and companies to effectively offer community choices including cool communities, smart meters, and other energy opportunities.</p> <p>Coordinate with local, regional and state agencies in the development and implementation of Energy Upgrade California, the approved State Energy Program providing financial incentives, education, and energy efficiency retrofits.</p> <p>Support and coordinate with statewide partners currently developing alternatives to PACE for residential customers.</p>
Financing Mechanisms			
Support energy efficiency programs and retrofits.	<p>Facilitate collaboration between various community providers to develop new and existing funding mechanisms for energy efficiency improvements.</p> <p>Market existing rebate and incentive programs to increase their uptake rates, particularly among hard-to-reach communities and those facing barriers</p>	<p>Implement Silicon Valley Energy Watch small business and nonprofit audit and retrofit programs.</p> <p>Provide approximately 250 moderate-income homes with energy efficiency education, audits, and direct installation of energy efficiency measures.</p> <p>Status: In the first 10 months of 2010, Energy Watch partners saved over 4 million kWh for Santa Clara County municipal</p>	<p>Provide approximately 250 moderate-income homes with energy efficiency education, audits, and direct installation of energy efficiency measures. Work with PG&E to identify additional sources of funds to allow expansion of the program beyond pilot phase.</p> <p>Commence both Innovator Pilot programs.</p>

² Comparison is 2009 to 2008 data due to lag time for PG&E data availability.

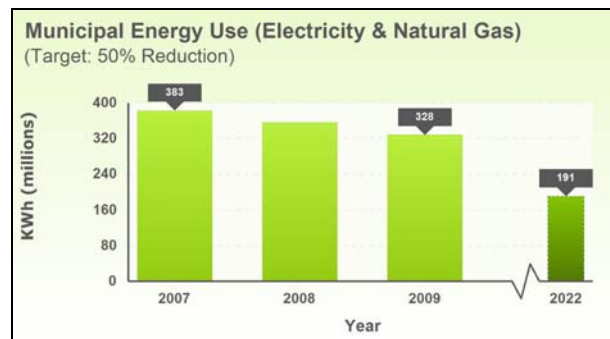
Strategic Focus	Proposed Strategy	2010 Work Plan	2011 Work Plan
	to clean energy implementation.	and nonprofit customers, reduced electricity demand by 688 kW, and distributed \$422,000 in rebates. Over 300 small business customers were served through the program. The Energy Watch moderate income residential program will commence January 2011.	
Strategic Partnerships			
Expand knowledge and awareness of energy efficiency program resources.	<p>Work in partnership with businesses, energy resource providers, Bay Area Air Quality Management District, Santa Clara County and cities, and community organizations to implement coordinated programs that minimize gaps and redundancies in program delivery.</p> <p>Coordinate with local workforce development and training providers to ensure a robust clean energy workforce that links to utility- and government-funded energy programs.</p>	<p>Implement Silicon Valley Energy Watch energy efficiency education, outreach, and marketing programs.</p> <p>Work with local community partners to implement 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>Participate as key partner in the City County Committee to plan local implementation of Energy Upgrade California (EUC).</p> <p>Status: Preliminary planning and neighborhood identification for the Energy Watch moderate income residential program is complete. EUC planning is ongoing; online web portal is live.</p>	<p>Continue working with County and regional partners to develop and implement the EUC- Santa Clara County program.</p> <p>Implement the Better Buildings Program, a DOE funded whole neighborhood approach to energy efficiency installations and workforce development, coordinated with the City's Environmental Services, Strong Neighborhoods Initiative, Housing Department, work2future, and San José State University.</p> <p>Work with local community agencies to implement the Energy Watch moderate income energy efficiency program in at least four neighborhoods. Work with PG&E and Santa Clara County cities to identify additional neighborhoods for implementation.</p>

Strategic Focus	Proposed Strategy	2010 Work Plan	2011 Work Plan
Communications and Engagement			
Implement community-wide energy efficiency programs.	<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>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> <p>Status: Strategic Energy Action Plan adopted by Council in May 2010.</p> <p>Silicon Valley Energy Map launched (Beta version) April 22, 2010. Ongoing development and updating.</p> <p>Identified neighborhood volunteers and “energy ambassadors” in the first target neighborhood for the Energy Watch’s moderate income residential program.</p>	<p>Status report to Council on implementation of Strategic Action Plan in March 2011.</p> <p>Implementation of Better Building Program and Innovation Pilot program.</p> <p>Continue quarterly updates and ongoing enhancements of Silicon Valley Energy Map.</p> <p>Develop Energy Efficiency Exhibit as part of San José Green Vision Clean Energy Showcase.</p> <p>Implement community Energy and Environment fairs in at least 4 Santa Clara County low/moderate income neighborhoods as part of the moderate income residential program. Work with City Council Districts to ensure energy presence at district community events.</p>

Performance Metrics



Per capita baseline figures have been adjusted to reflect service population numbers instead of only number of residents. This aligns with the methodology used for the General Plan update and captures energy use for both residents and employees in San José.



2007-2009 figures were updated to total energy usage including known renewable energy sources (solar/biogas). 2010 municipal energy usage figures are tentative and will be updated when final PG&E figures are available in July 2011.

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

Renewable energy comes from naturally replenishable resources and emits little or no greenhouse gases. Innovation and investment are key to providing affordable, renewable energy to the community, and in achieving this goal, the City will improve the environment, create local jobs, strengthen energy security and boost the economy.



1.12 MW Solar Installation at San José Airport

Achievements & Successes:

By the end of October 2010, 2,035 solar photovoltaic (PV) systems with a total capacity of nearly 28 MW had been installed in San José. This is the equivalent to 6,910 4.0 kW residential systems and is the most solar installed in any city in California.

50 MW of Solar on City Facilities:

One key focus of the Strategic Energy Plan is installing 50 megawatts (MW) of solar on City facilities. 50 MW is enough solar power to meet half of the municipal 2007 electricity usage, i.e., enough to meet municipal needs after Green Vision Goal 2 - Reduce Energy Use by 50% is reached.

Solar Assessment of City Sites – City staff has obtained high-level assessments on over 200 sites. Sites identified as highest in priority and feasibility were included in a Solar RFP that was released in June 2010. After reviewing proposals for financial feasibility, recommendations will be provided to Council in Spring 2011, with the potential for system design, engineering, and construction anticipated to take place later in the year.

Central Service Yard Power Purchase Agreement (PPA) – In 2010, the City entered into an agreement with Sun Edison to design, engineer, construct, operate and maintain a 1.3 MW solar installation at the Central Service yard. The project was commissioned in December 2010 and will provide an estimated \$27,000 in average annual energy cost savings. The estimated annual cost savings will be directed to the City Energy Fund for the first two years and to the General Fund in subsequent years.

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: <http://energy.sanjoseca.gov/>.
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.

Airport – The Airport installed a 1.12 MW solar array atop the Rental Car Parking Structure in mid-2010, which is estimated to produce approximately 1.7 million kWh annually, about 20% of the parking structure’s energy usage.

Muni Water – The Municipal Water Program is planning to install over 500 kW of solar at its pump stations and reservoirs. The first installation is underway at the Quimby Reservoir with Aborn, Hidalgo and Slopeview Reservoirs to follow.

Renewable Energy at the Plant: The San José/Santa Clara Water Pollution Control Plant (WPCP) is currently receiving 47% of its power from methane from its own processes and the adjacent landfill. In order to supplement this energy, the Water Treatment Plan completed a Request for Proposals and is currently beginning the design work for a 1.4 MW fuel cell project (with the option to increase by another 1.4 MW). Additionally, the WPCP is currently evaluating proposals for a 1 MW solar installation on adjacent buffer land. The City has also entered into negotiations to lease 40-acres of the WPCP Lands to the Zero Waste Energy Development Company to site a privately run dry anaerobic digestion facility to produce biogas. Please see Green Vision Goal 5 – Zero Waste to learn more about the current Demonstration Partnership being explored at the Plant.

Solar America City Grant: As one of only 25 cities nationwide designated as a Department of Energy (DOE) Solar America City, San José applied for and received a DOE Solar Market Transformation Special Project grant in July 2009. The goal of this grant, funded by the American Recovery and Reinvestment Act, is to enable cities to increase solar energy use in their communities through innovative programs and policies that could be easily replicated across the nation.



The City’s Solar America City activities in 2010-2011 have focused on:

- Providing coordinated education and outreach activities on energy financing strategies to property owners
- Increasing the awareness of the viability and range of solar technologies and opportunities by ensuring the community has a mixture of hands-on and other educational opportunities
- Increasing available resources for green collar workforce training

Highlights of the 2010 Solar America City activities include:

- Providing technical assistance to over 100 city employees for a group purchase of solar, enabling a low-interest loan from the San José Credit Union for those installations. By spring of 2011, 36 employees will have installed systems. City employees are getting solar installations at prices 40% below the typical market rate
- Neighborhood Workshops on Solar—basics of solar, financing options, and benefits
- Professional Workshops for Local and Regional Governments on Financing and Implementing Solar Installations

- Workforce Training Collaboration with area schools and training organizations to increase green jobs
- Green Vision Clean Energy Showcase

Solar Community Installations: The Silicon Valley Energy Map, an on-line interactive map of solar and green building projects in San José was launched in the spring. Viewers are 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. Other web resources, such as solar financial calculators, will also be available. To learn more, please visit: <http://www.svenergymap.org/>.

Legislation

Staff has continued to work with the California Public Utilities Commission (CPUC) on the implementation of the Renewable Energy Self-Generation Bill Credit Transfer (RES-BCT, which is enabled by AB2466). This new rate tariff enables cities to install and get credit for up to 1MW of solar beyond the demand for electricity at the installation site. This would enable municipalities to install excess solar at one site and apply the value of the solar electricity to the bill for another site. Unfortunately, the CPUC has determined that the bill credit for transferred energy should be based on the generation component of the rate, rather than the full retail value. This distinction makes it unlikely that RES-BCT can be cost-effectively implemented given current renewable energy costs. At the federal level, however, a recent decision by the Federal Energy Regulatory Commission (FERC) regarding Feed-in-Tariffs (FITs) has given the CPUC the ability to establish specific renewable energy prices for excess energy sold directly back to the utility, rather than transferred between utility accounts. Staff will continue to evaluate the opportunity for generating excess renewable energy under this rate tariff. Staff is also coordinating with other solar industry participants to extend the availability of incentives within the California Solar Initiative (CSI) program.

Solar Group Buy



In 2010, 133 members of the San José Credit Union, who are also City of San José employees and retirees, were able to explore the potential of solar energy as a more efficient and cost effective energy source thanks to an innovative group buy program that was the first of its kind in the U.S. The San José Employee Solar Group Buy program was the result of a partnership between the San José Credit Union and San José's Solar America City Program to help group members, no matter where they lived, reap the benefits of volume purchasing and low interest loans. Group members negotiated the group buy, signing 36 contracts totaling approximately 100 kilowatts of installed photovoltaic (solar electric) capacity. Four solar thermal (hot water) systems were also completed. The group buy model lowered solar system cost for a large group of homeowners and encouraged community participation in achieving San José's Green Vision goals. The Solar America City program has developed a guide for employees of other organizations on how to replicate this model. For more information please visit <http://energy.sanjoseca.gov/>.

Strategic Direction

Considerable progress occurred in 2010 toward the goal of receiving 100% of the City's electricity from renewable resources—both on the community and municipal level. In 2011, staff will continue to identify opportunities for increasing the use of renewables on City Facilities. San José will work with the new Energy Upgrade California program to promote financing opportunities for local residents and businesses. The Green Vision Clean Energy Showcase will continue to offer tours and hands-on experiences for the community.

The recent exhaustion of CSI funds for non-residential (commercial, industrial, government, etc.) projects in PG&E's service territory could have a significant impact on future solar installations. The exhaustion of funds is due to the incredible interest and success of this program in promoting solar energy production, and is a sign that further resources should be devoted to the program. The current uncertainty regarding any continuation of the program could have a chilling effect on project development in this sector and could impact the success of the current solicitation for solar on City facilities. Staff believes that solar energy projects directly support municipalities' efforts to control and reduce their operating budgets, by guaranteeing predictable energy prices for decades to come. Thus, staff will continue to strongly advocate for the return of the CSI rebates as well as other initiatives and programs that will allow us to successfully advance our goal of 100% electricity from clean renewable sources.

Climate Change

Currently the State requires energy providers to increase the mix of renewable energy included in their energy portfolios to 33% over the next several years. San José's currently receives the bulk of its electricity from PG&E. PG&E's [power mix](#) in 2009 consisted of non-emitting nuclear generation (20 percent), large hydroelectric facilities (13 percent) and renewable resources (14.4 percent), such as solar wind, geothermal, biomass and small hydro. The remaining portion came from natural gas (34.6 percent), coal (1.3 percent), and other resources including fossil-based resources (16.2 percent).

The City is partnering with PG&E to develop renewable energy generation projects on city facilities, businesses, and residential homes throughout San José. The City remains a nationwide leader in solar roof installations and leads the community with programs such as the Silicon Valley Energy Map and the Solar Group Buy. The City is also exploring biological technologies such as anaerobic digestion (AD) that produces methane for energy.

Since energy data used to calculate energy goals comes from PG&E and verified 2010 data is not available until mid 2011, 2010 will be calculated and reported next year. San José total electricity use in 2009 was 10,663,001,279 kwh and resulted in 4,655,325 metric tons (MT) of CO₂ equivalents.

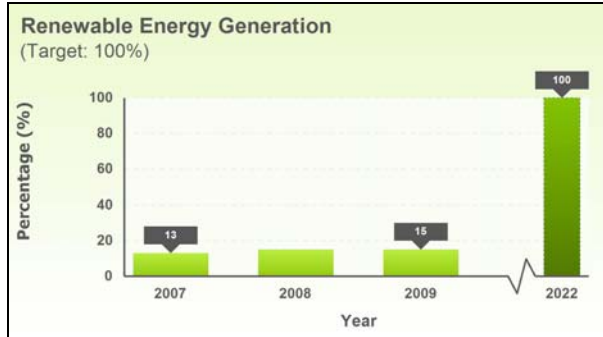
Work Plan

Strategic Focus	Proposed Strategy	2010 Work Plan	2011 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.	<p>Bring negotiated PPA for 1.3 MW at Central Service Yard to Council in early 2010 and install systems by Summer 2010.</p> <p>Develop a comprehensive strategy for the remaining MWs and bring forward to Council in Spring 2010.</p> <p>Status: Comprehensive strategy adopted by Council in May 2010.</p> <p>1.3 MW solar photovoltaic installation at the Central Service Yard planned for completion by 2011. Strategic Energy Action Plan presented to City Council in May 2010.</p> <p>12MW solar RFP for 38+ city facilities released.</p>	Complete analysis of, and prepare recommendations for additional municipal solar installations as based on submitted proposals.
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.	<p>Implementation of AB2466.</p> <p>Status: Comments provided to PG&E on AB2466 Rate Tariff.</p> <p>Analysis conducted as to potential use of AB2466 on existing city facilities.</p>	<p>Identify other legislative and regulatory opportunities for increasing the use of renewable energy for both the municipal and community sectors.</p> <p>Work to ensure ongoing incentives and rebates for solar projects</p>
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	<p>Conduct outreach to low-income and multifamily property owners on the CaliforniaFIRST program.</p> <p>Status: The CaliforniaFIRST program was to be part of the State Energy Program's</p>	Work with the new Energy Upgrade California, funded by the CEC and others under the State Energy Program to promote financing opportunities for San José sectors.

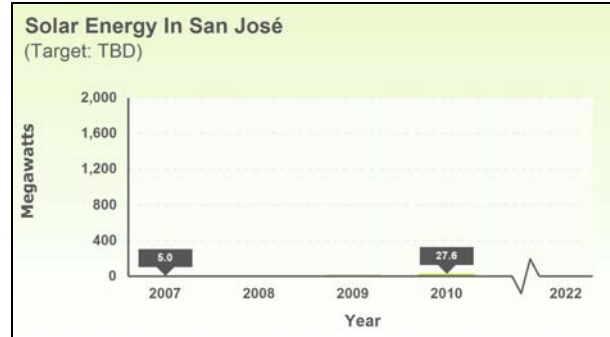
Strategic Focus	Proposed Strategy	2010 Work Plan	2011 Work Plan
	community.	financing initiatives. On July 6, 2010, the Federal Housing Financing Authority reversed their earlier position and that determined that PACE programs presented significant safety and soundness concerns, particularly in the area of the determination of priority liens over existing mortgages. Because of that, the CEC cancelled their funding for PACE programs.	
Pursue implementation of clean energy municipal financing for the community.	Participate in regional efforts and examine development of City-wide clean energy financing.	Bring Resolution to Join the CaliforniaFIRST Program to Council January 2010. If approved, begin Program implementation to San José property owners by Summer 2010. Status: See information on PACE programs in previous work item.	Work with the new Energy Upgrade California, funded by the CEC and others under the State Energy Program to promote financing opportunities for San José sectors. Identify and evaluate other financing opportunities for increasing the use of clean energy.
Communications and Engagement			
Expand knowledge and awareness of renewable energy program resources.	Work in partnership with businesses and organizations throughout community.	Conduct Green Vision Education and Demonstration Community Tours. Hold Solar Block Parties to promote CaliforniaFIRST. Hold ongoing community organization solar presentations. Participate in conferences, symposiums and summits. Provide education to K-12 schools. Status: Numerous workshops and community presentations have been held in 2010 related to	Establish an integrated Green Vision educational outreach program that incorporates many Green Vision goals. Establish a series of educational outreach activities for summer of 2011 focused on energy efficiency and renewables. Working with other green tech workforce development and training programs, provide integrated and collaborative educational activities as determined through a gaps analysis that will identify the priority actions for the City.

Strategic Focus	Proposed Strategy	2010 Work Plan	2011 Work Plan
		renewable energy. In addition, teacher training and “train the trainer” workshops have been held to provide solar curriculum and classroom materials.	

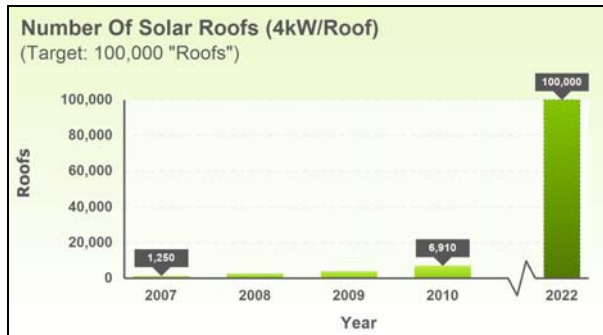
Performance Metrics



2007-2009 figures were updated to reflect final PG&E electricity usage data, PG&E power mix and electricity generated from known renewable sources (solar/biogas). 2010 electricity usage data is not available from PG&E until July 2011 and will be updated as those figures are available.



Target revised to reflect total MW of solar required to meet 100% of electricity from solar after the City meets GV Goal 2. 2010 data is based on most recent data available from PG&E on total MW of solar installed in San José (as of October 2010) and will be updated as final 2010 figures are available.



2007 and 2008 figures were updated to reflect 3kW/roof. 2010 data is based on most recent data available from PG&E on total MW of solar installed in San José (as of October 2010) and will be updated as final 2010 figures are available.

Build or Retrofit 50 Million Square Feet of Green Buildings

People spend 90 percent of their time indoors and buildings are responsible for 70 percent of our electricity use and 40 percent of our total carbon dioxide emissions. Green building practices lower energy, water and utility costs, while improving indoor air quality and increasing health and productivity.



Airport Terminal B - LEED Silver

Achievements & Successes

Currently San José has over 3.7 million square feet of certified public and private green building space with another 15.4 million square feet of green space in design or construction.

Private Sector:

Green Building Ordinance for Private Sector New Construction – This ordinance became effective in September 2009 and mandates levels of the U.S. Green Building Council (USGBC) Leadership in Energy and Environmental Design (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, 68 projects are subject to the policy and ordinance, 20 of which must become certified as green buildings, or forgo the Green Building Deposit. The remaining projects have or will be required to submit a green building checklist during the development review process.

CALGreen: California Green Building Standards Code – In 2010, City staff prepared for the implementation of the 2010 California Green Building Standards Code (CALGreen) that went into effect on January 1, 2011. The CALGreen Code includes mandatory requirements and voluntary measures for new residential and nonresidential buildings (including buildings for retail, office, public schools and hospitals) throughout California.

Key CALGreen mandatory requirements include:

- 20 percent mandatory reduction in indoor water use
- Separate water meters for nonresidential buildings' indoor and outdoor water use, with a requirement for moisture-sensing irrigation systems for larger landscape projects
- Requiring diversion of 50 percent of construction waste from landfills
- Mandatory inspections of energy systems (i.e. heat furnace, air conditioner, mechanical equipment) for nonresidential buildings over 10,000 square feet to ensure that all are working at their maximum capacity according to their design efficiencies
- Requiring low-pollutant emitting interior finish materials such as paints, carpet, vinyl flooring and particle board
- Parking requirements for bicycles and Clean Air Vehicles

Throughout 2010, City staff engaged stakeholders on CALGreen through roundtables, one-on-one interviews, meetings with representatives from local stakeholder organizations, discussions at County-wide and Bay Area-wide forums, and e-mail blasts to stakeholder lists. Planning, Building, Code Enforcement staff have presented information about CALGreen in the context of reconciling the State's mandatory requirements with current and potential revisions to the Private Sector Green Building Policy (City Council Policy 6-32) and the Ordinance to Establish Green Building Regulations for Private Development, and has also presented CALGreen as part of the package of 2010 California Building Standards that have been adopted by ordinance into the San José Municipal Code.

Private Sector Developments – Pending and recently approved Planning permits for private development that is expected to achieve LEED or Build it Green certification includes:

- Student Life Center/ Auxiliary Gymnasium at Bellarmine College Preparatory
- Ohlone Mixed Use Project (825 Units, 25,000 Sq. Ft Retail)
- Guadalupe Mines Road Residential Project (90 Single Family Units)
- Regional Medical Center Expansion (approx. 160,000 square feet)
- Equinix Data Center (approx 125,000 square feet)
- Irvine Company Apartment Communities (1700 Units, 15,000 retail square feet)
- Lincoln Avenue@ Willow Street Retail/Office Bldg (approx 40,000 square feet)

City Facilities:

New Construction – Five City Facilities, the Mayfair Community Center, Happy Hollow Park & Zoo, East San José Carnegie Branch Library, Norman Y. Mineta International Airport Terminal B, and Terminal B Concourse received Leadership in Energy and Environmental Design for New Construction (LEED-NC) certification in 2010. Over a dozen new City facilities are in various phases of design and construction and at least four, including the Environmental Services Building, Seven Trees Community Center and Branch Library, Bascom Library and Community Center and the Police Sub-station are anticipated to receive certification in 2011. Of note, Happy Hollow Park & Zoo is the first of its kind in the nation to achieve LEED Gold Certification.

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. The City continues to work with USGBC as the only municipal participant in the Portfolio Program pilot which



LEED Gold Happy Hollow Park & Zoo
(Photo courteous of Jamie Pham 2010)

Easy Actions You Can Take Now

1. Insulate your attic. For rebate information visit <http://www.pge.com>.
2. Get your house Green Point Rated. For more information visit <http://www.builditgreen.org/>.
3. Increase energy efficiency through green home improvements funded through the FHA PowerSaver program. For more information visit <http://fhapowersaver.org/>.
4. Use only Green Seal Certified products and services to clean and maintain your home. For more information visit: www.greenseal.org.

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 improvements to indoor air quality will 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 has committed to certifying at least 30 of the more than 400 existing City facilities over the next couple of years. However, due to budget impacts, staff will be re-evaluating this overall strategy and making adjustments as needed. Facilities planning certification in 2011 include the Almaden Community Center and Library, the Alum Rock Youth Center, the Gardner Community Center and Fire Station # 1.

Strategic Direction

Given that the building and construction sector continues to be slow, San José will focus on existing municipal building stock and potential energy savings. Staff will utilize 2011 as an observation year to evaluate effectiveness of the private sector Green Building Policy on new construction and develop an implementation plan for LEED for Existing Buildings. Additionally, staff is starting to implement CalGreen's Building Standards and Code and will update outreach materials accordingly.

Climate Change

Electricity generation, both in- and out-of-state, and other residential and commercial energy use accounts for 32 percent of California's greenhouse gas (GHG) emissions, second only to the transportation sector.³ The City of San José requires new buildings to achieve certification using either the USGBC or Build It Green's rating systems which strive to optimize the energy performance of buildings. While addressing emissions produced by existing buildings is key to reducing GHG emission to 1990 levels by 2020, constructing new green building and operating and maintaining them sustainably contributes to reducing emission such as carbon monoxide, nitrogen oxides, organic gases, sulfur oxides, and particulate matter.

Casa Feliz Studios: First Community Housing, a San José-based affordable housing developer, constructed and opened Casa Feliz Studios which achieved LEED-NC Gold certification in 2009 and was one of only thirteen recipients of the 2010 Governor's Environmental and Economic Leadership Award (GEELA) for its Sustainable Facilities Program. Casa Feliz Studios provides 60 affordable, energy-efficient units with private bathrooms and kitchens. The building is located close to transit and has many green features 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

Additionally, Casa Feliz also received an Award of Excellence from the Home Depot Foundation.

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

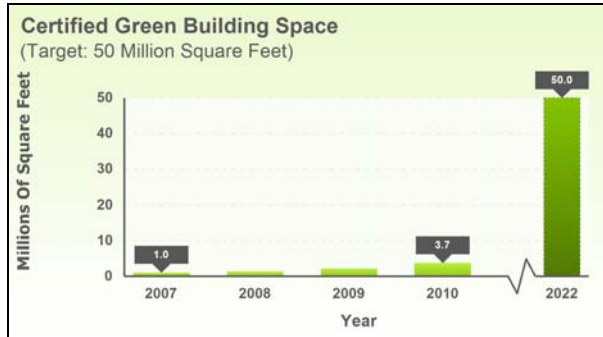
³ ARB. 2008. Climate Change Proposed Scoping Plan: A Framework for Change. Sacramento: California Air Resources Board. <http://www.arb.ca.gov/cc/scopingplan/document/psp.pdf>.

Work Plan

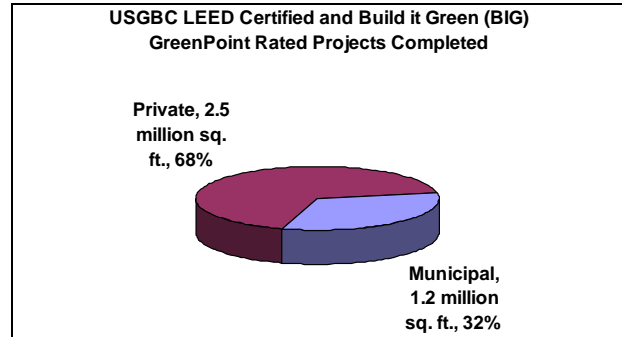
Strategic Focus	Proposed Strategy	2010 Work Plan	2011 Work Plan
Lead by Example			
Implement Private Sector Policy for New Construction.	Evaluate effectiveness of Policy by monitoring number of projects obtaining Green Building Certification. Policy modifications or Deposit increase may be necessary to increase levels of Green Building.	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. Status: Policy revision determined not to be necessary. Delaying requirements for retrofits and rehabs to account for time needed for preparation and implementation of new CALGreen requirements.	Track implementation of the Green Building Policy for new construction in the context of the new CALGreen code to inform future policy refinement and development.
Certify existing City facilities using LEED-EB Rating System.	Participate in USGBC Portfolio Program.	Prepare four City buildings for certification under LEED-EB Portfolio Program. Plan for LEED-EB certification of additional City facilities. Submit Portfolio Program pre-certification package to USGBC. Status: Submitted pre-certification package to USGBC 12/31/10.	Certify four City buildings under LEED-EB Portfolio Program. Evaluate strategy to certify additional city facilities under the Portfolio Program.
Communications and 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.	Conduct additional research and outreach in Spring 2010. Develop policy for Council approval Fall 2010. Status: Delayed pending implementation of CALGreen Code.	Engage stakeholders on implementation of Green Building Policy for new construction and CALGreen to inform policy on renovations and retrofits.

Strategic Focus	Proposed Strategy	2010 Work Plan	2011 Work Plan
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.	Test materials through counter staff activity. Finalize outreach materials after receiving feedback from counter staff testing. Status: Complete.	Update Outreach Material to reflect CALGreen requirements.

Performance Metrics



2009: 2.1 million square feet



2009: Private Sector accounted for 67% of square footage

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

Zero Waste helps keep our air, land, and water clean while generating more local jobs. Reusing products helps to reduce waste and eliminates the need to extract additional resources. Zero Waste provides a path to greater health and economic welfare.

Achievements & Successes:

Waste to Energy: San José is committed to highest and best use of waste resources. Currently, staff is prioritizing biological technologies such as anaerobic digestion (AD) that produces both feedstock for soil amendment products and methane for energy. These developing AD technologies are ready for commercialization in the US and can return organic materials back into the growing systems that produced them, thereby creating a truly renewable energy resource. Thermal technologies such as gasification are also called out in the work plan for further investigation to analyze where they might fit in San José's resource hierarchy. These heat-based technologies require additional steps before commercialization, including robust feasibility analysis to determine environmental, economic, and stakeholder impacts.

Steps taken to analyze City options and technology opportunities included a robust RFP for consultant services in 2009, after which, the City entered into contractual agreements with URS and HDR for technical and engineering services to assist with evaluation of technology options. Staff then developed an Organics to Energy Strategic Plan in summer 2009 as a roadmap for pursuing energy conversion technologies, which outlined the following strategies for phased implementation of organics to energy technology:

Include Energy Conversion as an Option in the Commercial Solid Waste Redesign Request for Proposals (RFP) Process – The City received three responsive proposals for organics processing which included conversion options, and five responsive collection proposals. Proposed processing could facilitate energy technology development that is integrated into city-wide commercial waste operations if the conversion options are deemed appropriate and cost effective. Staff is evaluating the proposals and anticipates awarding contracts this summer.



Residential Three Cart System

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.

Develop Anaerobic Digestion Technology – A significant step in capturing additional organic waste for diversion and 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 for the development of a dry fermentation AD facility. The facility could eventually process up to 270,000 tons of food and yard waste annually and would be the first such facility in the United States. The project is currently in the initial study phase of the CEQA process and construction could begin in 2011.

Align Opportunities at the San José/Santa Clara Water Pollution Control Plant (Plant) – As part of the Plant Master Planning Effort, staff is identifying ways to leverage Plant infrastructure and available onsite resources to maximize opportunities to convert organics to energy including the potential conversion of feedstocks such as fats, oils, and grease; food waste; and biosolids. In addition to diversion benefits, the Plant would also benefit from technologies that could provide additional options for biosolids management, and produce more renewable power for Plant operations.

Investigate Gasification – Gasification is a thermal process that may be ready for commercialization after technology demonstrations provide information on potential impacts and benefits. San José has completed a nationwide survey to identify municipalities that are in the process of obtaining conversion technology to identify lessons learned which can be applied to San José, and is closely tracking processes in Los Angeles City and County that are proposing thermal technologies. In order to analyze the potential for gasification in the San José area the City is interested in feasibility analysis as outlined in the Harvest Power case study below. Staff will be collaborating with the Regional Biomass Collaborative (Collaborative), which was designed to identify options for biosolids management, in order to align the City's feasibility efforts with the criteria developed by the Collaborative. This will assure a more applicable outcome for the feasibility analysis.

Strategic Partnership with Harvest Power: In February 2010, Harvest Power responded to a Request for Information released for the City's Green Vision Demonstration Partnership, proposing to demonstrate that biomethane suitable for generating electricity or fuel can be produced through gasification of wood and biosolids feedstocks. The project was deemed eligible by the City, making the project a viable grant proposal in a spring 2010 California Energy Commission (CEC) solicitation. In November, 2010, the CEC approved the award of \$1.9 million dollars to the City and partner Harvest Power, who will work with leading engineering consultants HDR and URS, as well as UC Davis to determine the feasibility of implementing a 2 year demonstration of the improved technology on Plant lands.

This project offers the City an opportunity to leverage private sector resources and grant funding to study and showcase an emerging technology that can meet regional as well as the City's Green Vision goals for waste diversion, waste to energy, alternative fuels, and job creation. The demonstration project could also further Plant goals for achieving energy self-reliance and for identifying alternative disposal options for biosolids. Other potential benefits of the agreements include reducing the carbon footprint for regional wood waste management and furthering the opportunity to develop new uses land at the Plant currently dedicated for drying biosolids.

Develop a Conversion Technology Research and Incubation Center – The Harvest gasification pilot is a first step towards developing a demonstration site which could cluster emerging technologies for further evaluation and input from stakeholders including the local community

and regulatory agencies such as the Bay Area Air Quality Management District. By collaborating with research and educational institutions in the area such as UC Davis, Stanford, and San José State, the City can leverage research experience and expertise in technology analysis, as well as increasing the potential for available research grants. A demonstration site such as this would also increase San José's reputation as a leader in technology innovation and encourage businesses to consider locating in the city.

Commercial Solid Waste System Redesign: To better enable the commercial sector to contribute to the Zero Waste Goal, the current commercial solid waste program is being redesigned to improve upon and maximize diversion of recyclable and compostable materials. The City has taken a leadership role in creating and executing a dual procurement process in 2010 that has encouraged innovation and creativity on the part of proposers and leveraged their expertise in collection and processing services. The two-step RFP process, with separate RFPs for Organics Processing and for Solid Waste Collection, was requested by Council in order to ensure that the greatest number of potential proposers would be able to respond. As a result, the City has received detailed, responsive technical proposals from multiple private sector companies that provided a variety of options to evaluate. Staff anticipates the evaluation to determine the best combination of collection and organics processing providers will be completed and a staff recommendation provided to Council in early spring 2011. After a one-year transition period from the current system, the new system is expected to begin in mid-2012. This redesign effort will help to position the City to meet or exceed the 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. Venues supported by the program include the San José Convention Center, Children's Discovery Museum, and Tech Museum. Upon completion of a successful pilot program in 2009, the Program was expanded and several event policies were approved by Council in 2010.

Events Recycling – Assistance to events included training classes for organizers, recycling equipment loans, free compostable food service ware, and staffing to collect recyclables and compostable material. Under the new policies, events with more than 1,000 attendees per day are required to:

- Ban Expanded Polystyrene (EPS, aka Styrofoam™) product use by food vendors;
- Require the use of #1 Polyethylene terephthalate plastic recyclable beverage containers for cups 7 oz. and greater, and paper cups for less than 7 oz.; and
- Collect, at minimum, plastics, glass, metals, and cardboard for recycling

In 2010, the Special Events and Venues Recycling Program continued to expand services to approximately 60 events while decreasing costs to the City. Of the events reporting data back to the program, 62 tons of material was diverted from landfill, achieving an 80% diversion rate. In August, the program received positive media coverage on NBC-11 highlighting waste reduction efforts for the AT&T 21st San José Jazz Festival.

City Facilities – 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 83% recycling rate, the highest of any City program in the nation. The City’s Environmental Preferable Procurement Policy supports this goal by providing a framework for responsible purchasing. Two milestones achieved in 2010 include a citywide purchase order for recyclable and compostable food service ware and a policy requiring the use of remanufactured toner cartridges.

Construction & Demolition Recycling Evaluation: 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), the first of its kind in the nation, was created in 2001. In 2009, a thorough evaluation of the program was completed, and in 2010 new program standards were implemented. The new program standards require certified facilities to meet a 55% waste diversion rate for 2010 and a 60% diversion rate in 2011. Other components of the new program are enhanced processing standards and a greater importance placed on reuse of the materials. These changes have and continue to encourage investment in local facility infrastructure. In 2011, the new State building code will require that all new construction projects divert their materials. Cumulatively, all of these more stringent standards will likely lead to a higher city-wide C&D waste recycling rate.

Residential Program Improvements: San José has the highest diversion rate for multi-family dwellings in the nation (over 80 percent). For single-family households, staff has implemented two separate 18-month organic waste collection and recycling pilot programs in ten pilot areas throughout the City, with approximately 10,000 households participating. Staff has launched a comprehensive public outreach plan to gain resident acceptance of the new collection methodologies and will be evaluating the results after pilot completion in 2011. Information gained from these pilots will shape the development of residential organics collection in the future.

Recycle Plus – On June 22, 2010, the City Council directed staff to negotiate and execute new service agreements for Recycle Plus residential solid waste services with existing contractors for an eleven-year term from July 2010 to June 2021. Negotiated financial benefits and program enhancements will improve the City’s Residential program and advance the City’s Green Vision and Zero Waste goals. Program improvements include emission reductions through collection fleet conversions to biodiesel or compressed natural gas, commitments to clean and domestic recycling of electronic waste, and increases in diversion. Allocating some savings from these new agreements to the construction of the Household Hazardous Waste Facility will provide San José residents a safe and convenient means to dispose of common toxic residential waste such as paints, pesticides, batteries and compact fluorescent light bulbs.

Neighborhood Clean-Up – Recycle Plus program enhancements also extend to the Neighborhood Clean-Up (NCU) program which is one of the most popular and well-received programs provided by the City. Staff has negotiated non-profit partnerships to promote the reuse of items disposed at NCU events, increased waste tire collection and diversion by taking

advantage of grant opportunities, increased diversion from 50% to 75% of materials disposed at the events, and is now able to provide approximately 60 no-cost bins for targeted Citywide blight clean-up in specific areas. Staff is also exploring the viability of moving from the current three-year rotational service model to a two-year service model that would increase the frequency of NCU events and serve every neighborhood in the City every other year. Adding battery collection and pharmaceuticals collection at the NCU events is also under consideration to promote safe disposal of these toxic materials.

San José Environmental Innovation Center: The San José Environmental Innovation Center (EIC), located at 1608 Las Plumas Avenue on a 4.2 acre lot, is being developed into a state-of-the-art technology Clean Tech Demonstration Center (CTDC) which will provide space for innovators to test and deploy clean and renewable energy projects; conference space for environmental workshops and job trainings; a Household Hazardous Waste (HHW) facility for Santa Clara County residents; and a materials reuse store. The existing 46,000 square foot warehouse, built in 1958, will be renovated into a Leadership in Energy and Environmental Design (LEED) facility with a minimum of silver level certification. Phase I work was completed in June 2010, and included: demolition, grading, site preparation, installation of storm drainage, soil and plant bio-retention swale, a modular wetland, asphalt and concrete paving, pervious and porous paving, parking lot, fencing and gates, sidewalk, lighting, landscaping and irrigation, and miscellaneous site amenities. The EIC is a critical component of the City's Economic Development Strategy, advances several of the City's Green Vision goals, and positions the City to attract more federal and state funding and private sector investment. The EIC will provide local jobs, from the beginning of construction throughout the life of the center and was ranked in the highest priority (Level 1) for City programs in the 2010 Community Program Priority Level Ranking Assessment completed as part of the 2010-2011 budget preparation process. The City is pursuing New Markets Tax Credits for the first time to complete the Phase II funding and allow construction to begin in 2011.

Go Green Schools: The City's Go Green Schools Program targets K-12 students and schools to bring the City's aggressive Green Vision to this critical audience. Go Green's extensive website, www.sjrecycles.org/gogreen/ provides a one-stop-shop for school resources. Go Green includes the flag-ship Minigrants program, which provided grants of \$500 to \$5,000 to fund 39 projects in 2010. By providing funding directly to schools, the Minigrants program leverages creative ideas and manpower of parents, teachers, and students to facilitate school zero waste projects. In May 2010, staff coordinated an annual conference, bringing together 250 teachers, students, administrators, and environmental service providers from throughout the San Francisco Bay Area. Also in 2010, Go Green worked with Resource Area for Teaching (RAFT) to provide over 150 K-12 schools 3,500 containers for classroom recycling collection. Finally, Go Green is collaborating with nonprofit and agency partners (StopWaste.org, San Mateo RecycleWorks, and the Green Schools Initiative) to develop the Green Star Schools certification program. Ten City schools will pilot Green Star in 2011 and earn certification to demonstrate their sustainability efforts. Go Green's resource center approach efficiently increases zero waste activities in San José schools in a time of unprecedented budget shortfalls.

Strategic Direction

Significant steps in the RFP process for the redesign of the commercial garbage and recycling program were achieved in 2010. Staff will provide award recommendations to Council in early 2011. Staff continues to pursue strategies to develop conversion technology infrastructure in San José, including the development of a dry fermentation anaerobic digestion facility at the Nine Par site adjacent to the Plant, evaluating the possibility of including conversion processing as part of the new commercial franchise, and conducting a gasification feasibility study in conjunction with Harvest Power and a CEC grant of \$1.9 million. Integral programs such as city facilities and special events recycling, Go Green Schools, and neighborhood cleanup will continue to be important programs to help San José achieve zero waste.

Climate Change

Greenhouse Gas (GHG) emissions are primarily derived from methane that is produced as a product of organic decay at the landfills and transportation emissions from pick-up to delivery of waste materials. California has implemented methane capture rules at landfills and is developing a mandatory commercial recycling program regulation. San José is a national leader in diverting waste from landfills and is finalizing a commercial redesign of its program that will offer recycling to all commercial facilities thereby increasing waste diversion from this sector. Also, municipal haulers are transitioning to cleaner burning fuels for their trucks reducing GHG emissions from the current fuel that is used. All of these efforts will help achieve the Green Vision goal and reduce GHG emissions. In 2010, approximately 569,379 tons of waste was trucked to the landfill translating into approximately 97,000 metrics tons of CO₂ equivalents.

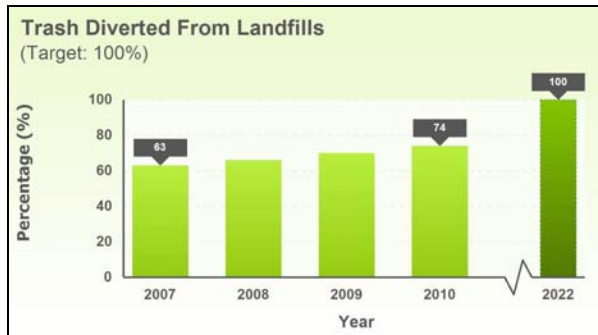
Work Plan

Strategic Focus	Proposed Strategy	2010 Work Pan	2011 Work Plan
Lead by Example			
Advance Commercial Redesign.	Negotiate contracts that comply with City policy and help the City meet green vision policies including reduced green house gas impacts, increased diversion, and the opportunity to create renewable energy from organic wastes. Proposed system solutions should provide cost efficient services and incentives for long term infrastructure development.	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. Status: In Progress –2 RFPs issued, proposals received and in final evaluation stage. Staff recommendations to go to Council in March 2011.	Provide award recommendations to Council. Complete franchise negotiations. Begin transition process to new exclusive franchise haulers.

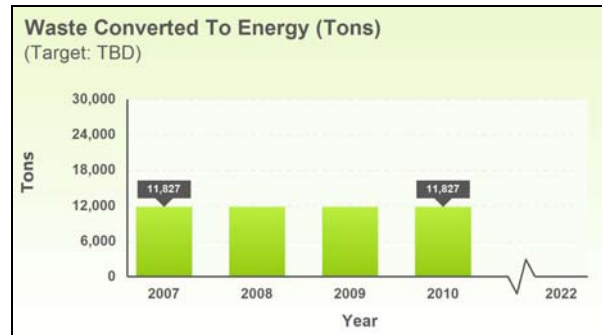
Strategic Focus	Proposed Strategy	2010 Work Pan	2011 Work Plan
Streamline Construction Demolition Diversion Deposit (CDDD) program.	Develop new program/reporting requirements for C&D facilities.	Implementation of CDDD proposed modifications. Status: Completed	
Maximize diversion and safe disposal opportunities for residents.	Test and evaluate strategies to enable residents to divert additional materials safely and conveniently.		Complete RecyclePlus pilot programs and evaluate results. Evaluate options for expansion of the neighborhood clean up (NCU) program. Pursue New Markets Tax Credit to complete Phase II funding. Begin Phase II construction of San José Environmental Innovation Center in early Summer 2011 to provide permanent San José Household Hazardous Waste (HHW) collection site.
Eliminate litter to achieve Zero Waste.	Reduce use of disposable, single use items that contribute to litter, including single-use carryout bags, water bottles, and polystyrene takeout food packaging.	Develop policies and programs to reduce litter. Status: Ongoing. Submit EIR to Council for finalization and ordinance to Council for adoption in Spring 2010. Status: EIR Completed. Initiate transition to support new ordinance. Status: Will begin in 2011. Implement Bring Your Own Bag Campaign. Status: Completed.	Develop policies and programs to reduce litter. Submit ordinance to Council for adoption in Spring 2011. Initiate transition to support new ordinance.
Increase waste diversion at San José schools.	Provide education and assistance to schools about starting and growing recycling programs.		Complete pilot Green Star School certification program. Launch Green Star School certification program.

Strategic Focus	Proposed Strategy	2010 Work Pan	2011 Work Plan
Drive large San José events toward Zero Waste.	Provide education and assistance to event organizers and food vendors to increase waste diversion.		Develop comprehensive educational tools for zero waste event organizers.
Strategic Partnerships			
Develop waste to energy technology infrastructure at the City's WPCP.	Collaborate 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>Finalize site feasibility assessment.</p> <p>Complete Environmental Review and permitting process.</p> <p>Conclude lease negotiations.</p> <p>Status: Ongoing.</p>	<p>Begin construction of dry fermentation AD facility at Nine Par.</p> <p>Conduct Feasibility study of gasification pilot unit.</p> <p>Integrate conversion options into new commercial system design.</p>

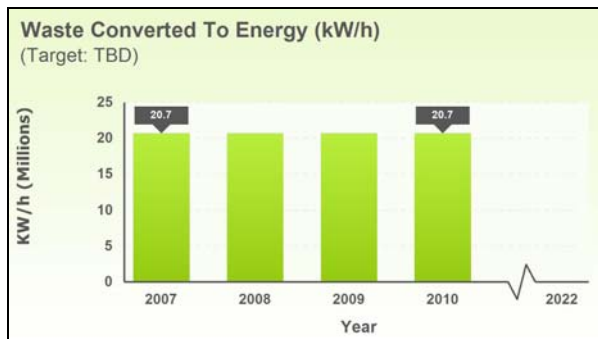
Performance Metrics



2009: 70 %. The original diversion rate of 62% shown for 2007 was the most recent (2004) diversion rate approved by CalRecycle. The updated diversion rates reflect data more recently approved by CalRecycle. 2010 data is still pending approval.



2009: 11,827 Tons



2009: 20.7 kWh (Millions)

Recycle or Beneficially Reuse 100% of our Wastewater

As San José's population is projected to increase, the demand for water is expected to further increase as an improving global economy brings more jobs to Silicon Valley. Combining this with a projected scarcity in our region's water supply due to climate change and reduced snowmelt, conservation efforts and investing in new water supplies, like additional use of recycled water are becoming more vital.



Recycled Water Purple Pipes

Achievements & Successes

To meet Green Vision's recycled water goal, the City has developed a long-term partnership with the Santa Clara Valley Water District to increase recycled water use up to 40 million gallons per day by 2022. Currently, South Bay Water Recycling (SBWR) provides an average of 8.4 million gallons of nonpotable recycled water per day through more than 120 miles of pipeline to reach over 600 customers in San José, Santa Clara, and Milpitas. In 2010 we connected 25 additional users increasing deliveries by 0.2 million gallons per day or 2%; however, we also saw an overall reduction in use of about 14% from 2009 deliveries. One of our larger customers, Metcalf Energy Center, showed a 9% decline from the recycled water used in 2009. The 2010's reduction in recycled water use for irrigation and industrial uses is attributed to cooler temperatures, increased rainfall in 2010, and our current economic downturn and subsequent reduction in energy use.

Pipeline Expansions: On April 29, 2010, SBWR executed an agreement with the US Bureau of Reclamation (USBR) to receive \$6.46 million in funds through the 2009 American Recovery and Reinvestment Act (Recovery Act). The funds will be used to reimburse the City for more than 40% of the cost of a \$15 million pipeline expansion program that will add 10 miles of pipeline to the existing distribution system, allowing our community to conserve up to 2 million additional gallons per day of our drinking water supplies. The City's Cooling Tower Initiative, which helps sites convert cooling towers from potable water to recycled water, has identified more than 60 potential recycled water customers within 50 feet of our SBWR pipeline.

Easy Actions You Can Take Now

1. Educate yourself and your family about the benefits of recycled water.

For more information go to:
www.sanjoseca.gov/sbwr.

2. Wait for full loads to wash clothes and dishes and save 20 gallons per load.
3. Water your lawn before 5 AM instead of midday and save 20 gallons every time.

For more information, please visit:
www.sanjoseca.gov/esd/water-conservation/residents/resident-actions.asp.

Advanced Water Treatment Facility: In October 2010, San José and the Santa Clara Valley Water District broke ground on the Advanced Water Treatment Facility (AWT) that will use microfiltration, reverse osmosis, and ultraviolet disinfection to further purify recycled water and blend it with tertiary-treated recycled water to reduce the salinity or total dissolved solids (TDS) of the final product to around 500 ppm, improving its quality for both irrigation and industrial nonpotable uses. This jointly-funded \$50 million project is also receiving Recovery Act grant funding through USBR, as well as a grant from the California Department of Water Resources (DWR) through the Integrated Regional Water Management Grant Program.

Plant Master Plan: The Plant Master Plan initiated in 2008, is being developed in part, to ensure that all of the Plant's effluent will continue to meet all health and regulatory standards necessary to allow for future use of recycled water. The draft Master Plan proposes to incorporate future operation of the AWT and provide for the future operational, economic, environmental, and social uses for the 2,600 acres of Plant land.



Cooling Tower Using Recycled Water

Grants: As noted above, in 2010 USBR awarded the City \$6.46 million from the 2009 Recovery Act program to provide over 40% reimbursement for the \$15 million cost of construction of up to 10 miles of recycled water pipeline extensions and related facility improvements. These pipeline extensions are planned for downtown San José, south San José, and industrial areas in north Santa Clara. Project construction began January 2010 and by December 2010, construction was 49% complete. In a follow up to the 2009 Recovery Act, on December 17, 2010 USBR published a solicitation for project proposals to compete for more than \$20 million in grant funds. The City will be applying for \$2 million in grant funds towards construction of \$3 million in pipeline extensions to industry. In addition, USBR awarded the Santa Clara Valley Water District \$8.5 million towards construction of the \$52 million AWT, which also received a grant of \$3 million from the California Department of Water Resources. In addition, in September 2010 the City received \$1 million from USBR towards a new \$20.7 million grant agreement providing reimbursement for past recycled water expenditures.

Efforts to Increase Nonpotable Demand for Recycled Water: Significant efforts that increases recycled water use during 2010 include the following projects:

Cooling Tower Initiative – The goal of the Cooling

Air Products and Chemicals, Inc.: In spring 2010, Air Products and Chemicals, Inc. (the Santa Clara Air Separation Unit), became a new addition to the South Bay Water Recycling customer base for use in their cooling tower. Through site analysis, Air Products determined that recycled water is a better, suitable option for their cooling process with a water cost nearly half the price of potable water. As a result, Air Products saves nearly \$100,000 per year, even with a few management changes. This new customer connection project takes strain off of the Bay Delta ecosystem by freeing up 62 million gallons of drinking water per year and exemplifies how private companies can use sustainable principles profitably while creating partnerships within the community.

Tower Initiative (CTI) is to serve an additional 2-3 million gallons per day (MGD) of recycled water to new cooling tower customers by 2013, 1 MGD of which will be in 2011. In pursuit of that goal, five new cooling towers were connected to the recycled water system in 2010, including Air Products and Internap, the first datacenter in the Bay Area to use recycled water for cooling. In 2010, SBWR has increased average annual recycled water use by about half-million gallons per day. Further support for the CTI was provided by the City's collaboration with Sustainable Silicon Valley (SSV), a regional non-profit organization dedicated to a sustainable future. SSV is developing the EcoCloud™ Innovation Network, a social networking forum where companies encourage each other to adopt sustainable practices. Currently, EcoCloud™ members are paying particular attention to the urban water cycle, focusing on the industrial use of recycled water as a way to minimize demand on drinking water supplies, lower total energy costs, and reduce greenhouse gas emissions. From the perspective of SBWR, the EcoCloud™ has exposed more facility managers and industry executives to information about recycled water use, facilitating the customer connection process.

Salinity Management – In an effort to prevent salt-related impacts that could limit the beneficial uses of recycled water, the City's Salinity Management Study will investigate the sources of salt load to the Plant in order to identify major salt contributors and evaluate potential salt control strategies. The ultimate goal of this effort is to identify the most cost effective salinity management measures compared to the cost of reverse osmosis treatment. The project is anticipated for completion in 2011.

Connection Fees and Dual Use Plumbing Ordinance – The City of San José completed a three-year study to evaluate an appropriate increase in the sanitary sewer treatment plant connection fee. The fee will include support for recycled water infrastructure repair, replacement, and connections to the system. The fee will be proposed to the Transportation and Environment Committee in 2011.

A draft 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 existing or planned SBWR pipeline alignment and would mandate the use of recycled water when available. The proposed ordinance would also require dual plumbing systems 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. However, after discussing the proposed ordinance with various stakeholders in a series of facilitated meetings and open sessions, SBWR staff has recommended revising the draft ordinance to minimize the potential for stranded investment on the part of developers, and intends to revise and re-propose the ordinance to the Transportation and Environment Committee in 2011.



Landscaping Irrigated With Recycled Water

Legislation

Significant legislative activities in 2010 included adoption of the State Water Resources Control Board “Recycled Water Policy,” providing a general irrigation permit and prescribing the monitoring of a number of constituents of emerging concern in recycled water used for groundwater recharge. Also during 2010, recent changes to the California Plumbing Code were implemented, facilitating the use of recycled water in dual-plumbing installations.

Strategic Direction

During 2011 South Bay Water Recycling will focus on increasing system reliability and the development of recycled water use through partnerships with public, private, and non-profit entities in Silicon Valley. An Advanced Water Treatment Facility (AWT) is expected to be operational in 2012 and improve water quality to facilitate more recycled water use. In partnership with the Santa Clara Valley Water District, staff will coordinate operations and maintenance to enhance system reliability and water quality. SBWR staff will work with investor-owned utilities (San José Water Company and Great Oaks Water Company) to extend pipelines and develop uses of recycled water, further improving the return on investment to tributary agencies. Staff will also continue to partner with Sustainable Silicon Valley through the “EcoCloud™ Virtual Industrial Ecosystem” that supports the City’s Cooling Tower Initiative, providing recycled water as a substitute for drinking water in various industrial applications including cooling towers. In addition, staff will continue to meet with business, industry associations, and environmental advocates with the goal of reaching a consensus on an appropriate ordinance to require the indoor and industrial use of recycled water for sites within proximity of the SBWR pipeline to support our region’s development of a more sustainable water supply.

Climate Change

The 2009 California Climate Adaptation Strategy identified the need to change water management and uses because of climate change as one of the key findings. Changes in sea-level rise may bring salt water intrusion to our local waterways, snow pack fluctuations and increases in the severity and variability of weather patterns support optimizing local water supplies due to droughts or flooding. Recycled water provides a sustainable alternative to importing water from around the state. Using local water supplies effectively leads to better management of our watershed, maximizing the ability of reservoirs to capture rainfall and avoid flooding, providing increased stream volume to support the riparian ecosystem, and reducing the energy required to import non-local supplies. Reducing the energy needed to transport water, as well as conserving the amount of water used will reduce greenhouse gases. As a result, California communities are working with the state to develop more sustainable solutions towards our current and future water needs.

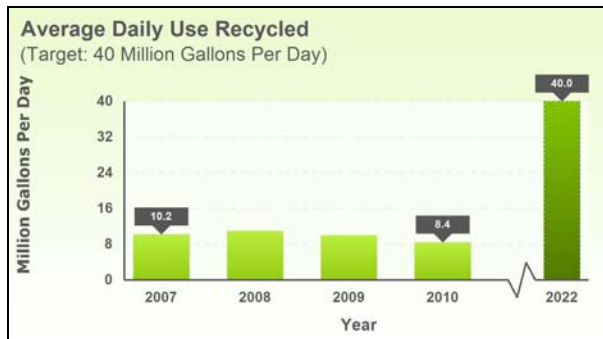
The recycled water system in San José currently emits approximately 2,490 metric tons (MT) of CO₂ equivalents to deliver 26 acre-feet per day of recycled water or approximately 8.5 MGD. In 2010, approximately 494,363 metric tons (MT) of CO₂ equivalents were avoided through water conservation programs.

Work Plan

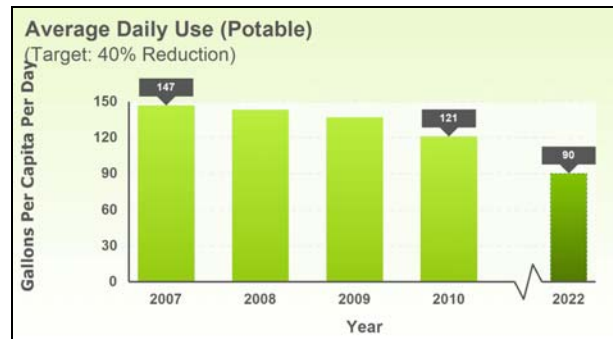
Strategic Focus	Proposed Strategy	2010 Work Plan	2011 Work Plan
Lead by Example			
Expand uses of Recycled Water.	Re-evaluate and create criteria for new developments in the vicinity of SBWR pipeline alignments.	Continue to work with the development industry to craft an appropriate ordinance. Status: Pending.	Incorporate industry suggestions from 2010 outreach into revised ordinance and re-propose to Transportation and Environment Committee.
Financing Mechanisms			
Finance reliable recycled water infrastructure and expansion.	Include recycled water connection fee within sanitary sewer treatment plant connection fee to support infrastructure repair and replacement. Leverage grant funds to increase reliability and return on investment.	Pursue Integrated Regional Water Management Plan – Prop. 84 funding and Title XVI grant funding through the USBR. Develop local and regional partnerships to develop the use of recycled water in the state. Status: In progress.	Work with USBR to maximize funding opportunities in support of increasing our return on investment and reliability. Assure that SBWR remains a strong presence in California in support of recycled water. Support adoption of the new sanitary sewer treatment plant connection fee.
Strategic Partnerships			
Support our Santa Clara Valley Water District partnership agreement for long-term development of recycled water use. Develop local partnerships to support a locally sustainable water supply.	Assure current and future recycled water customers continue to receive a reliable high quality product through implementation of the Advanced Water Treatment facility.	Council and Water Board approval of long-term recycled water agreement framework in Spring 2010. Status: Agreement approved.	Implement agreement with Santa Clara Valley Water District for operation and maintenance of the AWT.
Support the State's goals for additional use of recycled water.	Participate in regional and State activities to promote the safe use of recycled water.	Provide support in the development of a State Recycled Water Policy and General Permit for efficient and consistent regulation in support of additional recycled water use. Participate in regional efforts to streamline site supervisor training. Status: In progress.	Continue to support and develop efficient and consistent regulated uses of recycled water in the region and State.

Strategic Focus	Proposed Strategy	2010 Work Plan	2011 Work Plan
Communications and Engagement			
Create public and private partnerships to enhance City's ability to market recycling water to local industry.	Partner with Sustainable Silicon Valley to launch the EcoCloud™, a virtual industrial ecosystem where industry, government and educational institutions can work together to become more sustainable.	Pursue Cooling Tower Initiative and local community and regional partnership to support the development of recycled water use. Status: In progress.	Assist with EcoCloud™ website development and success, workshops and other project to facilitate customer connection.
Outreach to business, industry associations, and environmental advocates.	Solicit feedback on various ordinances related to recycled water.	Focus on businesses within proximity of the SBWR pipeline to support our region's development of a more sustainable water supply.	Collaborate with non-profit, academic and private sector partners to facilitate the use of recycled water for cooling towers. Implement web-based social networking tools to enhance marketing by creating a community of industrial customers.

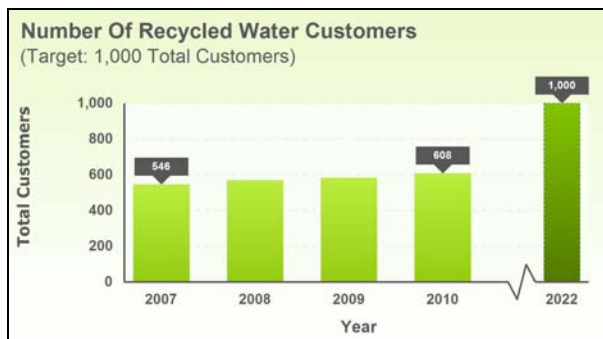
Performance Metrics



The 2010's reduction in recycled water use for irrigation and industrial uses is attributed to cooler temperatures, increased rainfall in 2010, and our current economic downturn and subsequent reduction in energy use.



2010 GPCD is based on the past 12 consecutive months of data that was currently available. In 2009, the average daily use of potable was 137 gallons per capita per day.



Since 2009, 24 more customers have come online.

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.



Achievements & Successes

The General Plan Update is scheduled to be completed in 2011. The following major milestones in the development of the General Plan have been achieved through a successful City led process based on significant involvement of community members and other interested stakeholders.

Completion of Envision Phase II (April 20, 2010): Council selected the Preferred Land Use Scenario recommended by the Task Force as the foundation for the Envision General Plan text and Land Use/Transportation Diagram. The Scenario is based on the Task Force and community's draft Vision and Guidelines reviewed and accepted by Council in 2009. Key products of Envision Phase I include the draft Envision San José 2040 Vision (Draft Vision), draft Land Use/Transportation Scenario Guidelines (Guidelines), development of a Planned and Identified Growth Areas map, and selection of potential job and housing growth amounts and locations for five Land Use Study Scenarios. The Draft Plan aligns with this scenario and supports the development of up to 470,000 new jobs and up to 120,000 new housing units, with the goal of achieving a Jobs-to-Employed Resident ratio (J/ER) of 1.3 by 2040. San José currently has a 0.8 Jobs-to-Employed Resident ratio. Key features of the Preferred Land Use Scenario include:

- Identifying “villages” to support the invigoration of suburban locations to vibrant, walkable, bicycle-friendly, mixed-use areas at strategic locations throughout the City
- Placing substantial job and housing growth capacity at transit locations in the Downtown, existing light rail stations, future bus rapid transit stations, and at the future Berryessa and Alum Rock BART stations
- Locating significant job growth capacity at existing employment lands (i.e., North San José, Edenvale, North Coyote Valley), and in proximity to the Milpitas BART station and Cropley Light Rail Station
- Protecting existing neighborhoods
- Maintaining near term residential capacity for up to 85,000 dwelling units in the first phase of the Envision Plan with additional housing capacity up to 120,000 units by 2040

Release of Complete Draft Plan (September 20, 2010): On September 20, 2010, a major milestone in the Envision San José 2040 General Plan Update process was achieved on schedule with the release of the first complete Draft of the Envision San José 2040 General Plan (Draft Plan) document. The Draft Plan incorporates Measurable Standards for Sustainable Development for various topics within the Plan and comprehensive evaluation of those Standards as part of the General Plan Annual Review process set forth in the Plan's Implementation

policies. The Draft Plan has been posted for public review and comment on the Envision website. The accompanying Draft Envision General Plan Land Use/Transportation Diagram illustrating General Plan land use designations for all properties is also available for review and comment. Together these documents build upon the Preferred Land Use Scenario selected by the City Council in April 2010, the work of the Envision Task Force, and the participation of approximately 5,000 community members during 50 Task Force meetings, 7 workshops and several extensive online community engagement activities. Prior to Council consideration of Envision San José 2040 General Plan in mid-2011, the City will continue to work with the Envision Task Force and community members to refine the contents of the Draft Plan.

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.

Strategic Direction

Following adoption of the updated General Plan, the City will 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

The Draft Envision General Plan includes policies and a Land Use / Transportation Diagram developed to reduce the City's generation of greenhouse gas emissions and to provide tools for long-term adaptation to the effects of climate change. The Climate Action Plan / Greenhouse Gas Reduction Strategy, which is being developed in tandem with the General Plan Update process, will put forth a road map to reduce greenhouse gas emissions, including those related to transportation, through policies and a land use plan that support a more compact urban form and

Easy Actions You Can Take Now

1. Participate in the Envision General Plan Update process. Community members can participate in the completion of the General Plan Update, including comment on the Draft Plan and Draft Envision General Plan Land Use/Transportation Diagram, available at: www.EnvisionSJ2040.org.
2. Participate in the future implementation of the General Plan, by supporting the General Plan policies and taking part in subsequent policy development and implementations actions such as the preparation of Village Plans.
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.



Santana Row

greater use of walking, mass transit or bicycling as a means of travel between home, work, school, shopping and other services.

In 2007, San José emitted a total of 7.61 million metric tons (7.61MMT) of greenhouse gas emissions of which 3.52MMT was attributed to transportation. The Green Vision and Draft General Plan support reduction of the City’s greenhouse gas emissions to 6.6MMT by 2020 and to 3.04MMT by 2035.

Work Plan

Strategic Focus	Proposed Strategy	2010 Work Plan	2011 Work Plan
Lead by Example			
General Plan Update.	Complete Envision San José 2040 General Plan Update.	Finalized Preferred Land Use Scenario and Draft Plan policies.	Complete environmental review (EIR) and adopt General Plan Update, including Goal #7 Sustainability Measures.
Advocating Policies			
Monitor State Government.	Review proposed legislation and implementation of existing laws related to sustainable land use planning.	On-going review and analysis as needed.	On-going review and analysis as needed.
Financing Mechanisms			
Grants.	Seek outside funding sources for sustainability planning activity and implementation of the General Plan.	Leveraged General Fund support. Applied for 4 sustainable land use planning grants.	Continue to apply for planning grants in order to support development of Village Plans and other General Plan implementation actions.
Strategic Partnerships			
Stronger Advocacy; Broaden Partnerships.	Increase Role as Advocate in State / Regional planning and grow partnerships with non-profits.	Participated in MTC, ABAG, and BAAQMD regional planning initiatives.	Continue to participate in MTC, ABAG, and BAAQMD regional planning initiatives (e.g., Sustainable Communities Strategy).
Communications and Engagement			
Publicize Draft Plan policies.	Focused civic engagement with Task Force, identified stakeholders and community organizations.	Completed Phase II Outreach activities (Cal APA and NCAPA awards), engaging approximately 5,000 community members.	Citywide residential mailer; Neighborhood Group Presentations; Task Force Meetings; Public Hearings.

Performance Metrics

As noted above, the draft General Plan policies include performance measures for a wide range of sustainability indicators, incorporating the Green Vision and other goals related to land use planning and the delivery of City services. For example, in addition to goals for solid waste diversion, creation of green jobs and other Green Vision subjects, transportation related Performance Metrics incorporated within the Plan include vehicle miles traveled (VMT) and the transportation mode split for commute trips and land use related Performance Metric include the percentage of City residents living within walking distance of various services. The draft Plan also includes an annual reporting requirement for review of the City's achievement of these goals through implementation of its General Plan.

The Draft Plan is substantively complete and the preparation of environmental documents necessary for adoption of the Plan is scheduled to finish this year. Following adoption of the Plan, achievement of Green Vision Goal #7 can be evaluated through monitoring the General Plan's implementation.

Community Participation

The Envision San José 2040 General Plan Update is based in community engagement and participation.

Over 5,000 community members have participated in the development of the General Plan through:

- Interactive on-line tools
- 47 Task Force meetings
- 8 community meetings and workshops
- 23 meetings with community organizations

Envision San José 2040 has been recognized for its successful engagement of the community through Planning Best Practices award from the California State and Northern California chapters of the American Planning Association.

For more information please visit:
www.EnvisionSJ2040.org.

Ensure 100% of Public Fleet Vehicles Run on Alternative Fuel

In Santa Clara County, more than 40 percent of our greenhouse gas emissions come from cars, trucks, buses, and trains. Converting 100 percent of the City's fleet to alternate fuels will not only allow us to reduce greenhouse gas emissions and improve air quality, but to do so in a way that models the way for others.



Parking Compliance 100+MPG Plug-In Hybrid

Achievements & Successes

1,075 of the City's vehicle fleet, or 42%, currently runs 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).

Optimize Fleet Size: In compliance 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. This year, the fleet size reduction was 1.7%.

Develop Partnerships:

- *Electronic Transportation Development Center* – In 2010 the City entered into several strategic partnerships focused on developing electric vehicle transportation solutions. One such partnership was with the Electronic Transportation Development Center (ETDC). The ETDC is focused on establishing incubator companies and Silicon Valley Technology Companies with the goal of strengthening the necessary infrastructure and supply chain for electric vehicle (EV) manufacturing, in concert with companies who specialize on expanding existing compressed natural gas infrastructure.
- *Better Place* – The City also partnered with Better Place, the City of San Francisco and a coalition of leading Bay Area stakeholders across public agencies, private companies and community organizations on the development of the Bay Area Electric Vehicle Taxi Corridor project intended to showcase an innovative, scalable and replicable emissions reductions strategy utilizing electric vehicle battery switch technology. Through this partnership, the City, Better Place and San Francisco developed and submitted a grant proposal for Metropolitan Transportation Commission (MTC) Climate Initiative funds that will be combined with funding from Better Place and other local partners to deploy and operate an EV Taxi demonstration program.
- *Gov-2-Gov Coordinating Council* – The Bay Area EV Gov-2-Gov Coordinating Council includes nine Bay Area counties and the cities of San José, San Francisco and Oakland. The Gov-2-Gov Council developed a common regional strategic vision including goals,

projections and principles regarding the deployment of electric vehicle charging infrastructure and also provided coordination of grant submittals within the regional framework such as the EV Corridor Coalition partnership which was formed to submit a region-wide California Energy Commission grant request for Electric Vehicle charging infrastructure. The grant request (described below) was focused on funding to help create a distributed charging network by installing EV chargers in public facilities throughout the region.

- *ChargePoint America* – The City has also partnered with Coulomb Technologies and their ChargePoint America Program. ChargePoint America is a program sponsored by Coulomb Technologies to provide electric vehicle charging infrastructure to nine selected regions in the United States including Austin, TX; Detroit, IL; Los Angeles, CA; New York, NY; Orlando, FL; Sacramento, CA; Redmond, WA, Washington D.C. and the San José/San Francisco Bay Area. The program was made possible by the American Recovery and Reinvestment Act through the Transportation Electrification Initiative administered by the U.S. Department of Energy and the objective is to accelerate the development and production of electric vehicles to substantially reduce petroleum consumption, reduce greenhouse gas production, and create jobs. Through this partnership, the City of San José will receive 55 EV charging stations.

Grants Received: The City, through collaboration with other regional agencies, has received several grants or notices of proposed award in support of electric vehicle infrastructure and vehicle technologies. The following is a summarized list of grants received during 2010:

- *Greater Bay Area EV Corridor Project* – Submitted by the Coalition of Greater Bay Area jurisdictions and EV firms, \$69,000 in funding will help create a distributed charging network by installing EV chargers in public facilities around the region. A portion of this California Energy Commission (CEC) grant provides for the installation of 5 electric vehicle chargers in San José. The City may obtain additional funds through a second funding round by the CEC for the same purpose.
- *Bay Area Electric Vehicle Infrastructure Readiness Pilot Project* – Integrated ABAG-BAAQMD proposal for a regional charging network. This grant provides funding for EV chargers as well as their installation; process streamlining and development of EV-ready building codes and public works guidelines. The grant also provides for the development of information architecture that will allow drivers to “see” the location and status of all chargers in the network. This is an MTC Climate Initiative Grant that will provide 43 electric vehicle chargers and their installation in San José. The MTC has set aside \$2.4 million in a reserve for EV infrastructure in the region. The agency has not yet determined how much if any of those funds will be dedicated to public sector infrastructure. A decision by the MTC is anticipated in the before the end of FY 2010-11.



October 27, Bay Area Climate Collaborative Announces \$2.8M MTC Grant for Government EV Fleet National Demonstration Project

- *Local Government EV Fleet Project* – Regional proposal involving 11 public agencies including San José, Alameda County, Sonoma County, San Francisco, Oakland, Marin County, Fremont, Concord, Santa Rosa, Sonoma County Water District, and Marin Municipal Water District. This is an MTC Climate Initiative Grant that will provide \$2.8 million to obtain EV fleet vehicles and chargers for the region. A portion of this grant will fund the acquisition of 3 electric vehicle sedans and EV chargers for the City of San José’s fleet.
- *Bay Area EV Taxi Corridor* – This demonstration project, in partnership with Better Place, will deploy EV taxi fleets in both San José and San Francisco. The Project includes a complement of battery-switchable taxis for both San José and San Francisco, and up to 2 battery-switch stations in San José. This is an MTC Climate Initiative Grant totaling \$6.9 million that will be combined with funding from Better Place and other local partners to deploy and operate the EV Taxi program during the demonstration period.

Diesel Particulate Filters: In January 2007, the California Air Resource Board (CARB) developed a fleet regulation for public agencies and utilities that is focused on achieving significant diesel particulate matter (PM) emission reductions. The regulation for on-road heavy duty diesel fueled public and utility fleets is one of the California Air Resources Board's efforts to reduce both criteria pollutant emissions and exposure to toxic air contaminants. The regulation mandates public agencies and utility vehicle owners reduce diesel PM emissions from their affected vehicles through the application of Best Available Control Technology (BACT) on these vehicles by specified implementation dates. Emission reductions are usually achieved with the installation of a Diesel Particulate Filter (DPF) in the exhaust system and in some cases the retirement of older non-compliant units. Implementation is phased-in by engine model year groups.

The City of San José has achieved compliance with the regulation with a combination of BACT and retirement of older heavy duty diesel powered trucks. Currently, 60% of the fleet has been retrofitted with a diesel particulate filter

Car Share Program: The City is developing a process to launch a Car Share program for City staff use during the workday and program participants / residents use after hours and on weekends. The program activation is being targeted for Fall 2011. The intent of the program would be to advance the City's Green Vision goals with specific focus on accelerating efforts to green the City's fleet and reduce per capita vehicle miles traveled and fossil fuel consumption, as proposed in the General Plan update.

At its essence, car sharing is a quasi “library service for cars.” Participants enjoy the benefit of a private vehicle without the cost and responsibility associated with owning that vehicle. To access the vehicles, individuals would join an organization that maintains a fleet of vehicles in a network of locations. Participants pay an annual membership fee as well as an hourly usage fee. A car share program could enhance the City's green mobility efforts by making alternative transportation options, such as transit, carpooling or cycling, more attractive. Potential users may view these options more favorably when paired with a car share program that would provide access to a vehicle if needed during the day to run to a meeting or an errand. Car sharing expands the transportation choices available to those who do not have the means to own a car. It can also enable families with multiple cars to consider reducing the number they own, or to forego car ownership entirely. Depending upon how the City's program is structured, it could also reduce the City's operating costs, if not immediately then over time.

(DPF) which reduces diesel PM emissions by 85%. The current retrofit program will be completed by the end of 2011.

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 28% since 2002.

Off-Road Diesel Engine Emission Standards: In July of 2007, the California Air Resources Board (CARB) exercised its unique authority to set standards for emissions from existing fleets of off-road diesel equipment in the construction industry. CARB adopted an “off-road rule” that steadily reduces the nitrogen oxide (NOx) and particulate matter (PM) that these fleets can lawfully emit. The rule also required the retirement, retrofit, repower or replacement of equipment included in any fleets that cannot meet the stringent standards. In February 2010, CARB issued a delay of the regulation's NOx and PM requirements pending further notice. Reporting, labeling, idling and disclosure requirements are still in effect.

The City’s off-road diesel complement is in compliance with the currently active elements of the CARB “off-road rule”. Several amendments to the “off-road rule” are being discussed by CARB. As those amendments are realized, the City will develop a plan to comply with amended regulation.

Strategic Direction

In order to meet the Green Vision goal that 100% of the public fleet will run on alternative fuels staff will focus on three core areas: updating procurement specifications, seeking grants to update current fleet and to expand alternative fuel infrastructure, and develop a car-share program to help support the City’s fleet needs.

Climate Change

Reducing the vehicle miles traveled is usually the first step in reducing greenhouse gas emissions from vehicles however San José citizens rely on the City to provide effective services which does not prioritize reduced vehicle use. The focus on right-sizing the fleet by eliminating extra older vehicles and to down-size the size or type along with choosing the alternative fuel version whenever possible and practicable will achieve the maximum Greenhouse Gas (GHG) emission reductions without impairing City services. According to data calculated using EPA metrics for fuel, since 2003 GHG emissions have been reduced by 16,743 metric tons of CO₂ equivalents, or by 28%.

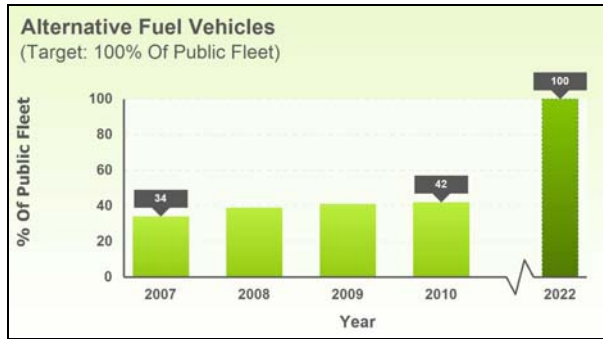
Work Plan

Strategic Focus	Proposed Strategy	2010 Work Plan	2011 Work Plan
Lead by Example			
Reduce fuel consumption and GHG emissions.	Use higher fuel efficiency vehicles in public safety fleet.	Pilot alternative vehicle manufacturers who offer purpose built patrol	Implement MTC and CEC Grant projects.

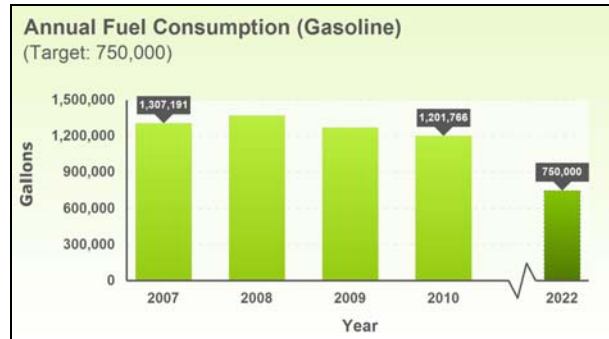
Strategic Focus	Proposed Strategy	2010 Work Plan	2011 Work Plan
		<p>vehicles.</p> <p>Introduce available hybrid technology into the larger heavier diesel powered fleet complement.</p> <p>Status: The vehicle review committee continues to evaluate purpose built patrol vehicles including the Ford Taurus, Chevrolet Caprice. Both models to be released in 2011.</p>	<p>Complete the evaluation / pilot process of purpose built patrol vehicles.</p> <p>Develop an updated procurement specification for the new vehicle standard.</p>
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.	<p>Submit applications for grant funding opportunities through AB 118 for expansion of the plug in hybrid fleet and construction of solar charging infrastructure.</p> <p>Status: Successfully landed an MTC Climate Initiative grant to purchase 3 Nissan Leaf electric vehicle and associated vehicle charging infrastructure for the City's Municipal Fleet. These 3 EV's will replace 3 older gasoline powered vehicles.</p>	<p>Collaborate with regional partners in future grant solicitations.</p> <p>Seek grant funding to complete the required work to bring the final complement of Heavy-Duty in compliance with CARB regulations.</p>
Strategic Partnerships			
Expand alternative fuel infrastructure.	Collaborate with other jurisdictions for regional compatibility.	<p>Collaborate with The ETDC and Gov2Gov in applying a diverse complement of EV vehicles and building a sustainable EV charging infrastructure throughout the City.</p> <p>Status: The City has participated in several regional efforts to standardized EV infrastructure and developed a common regional strategic vision including goals, projections</p>	<p>Collaborate with regional partners in future grant solicitations.</p> <p>Develop a local strategy to deploy a Car-Sharing program in San José that could support the City's fleet needs during the workday and be available for program participants after hours and on weekends.</p>

Strategic Focus	Proposed Strategy	2010 Work Plan	2011 Work Plan
		and principles regarding the deployment of electric vehicle charging infrastructure as well as provide coordination of grant submittals within the regional framework. San José has participated in several regional EV charging grant solicitations which have resulted in grant awards. A summary of those awards is listed above in the Grants Received section.	

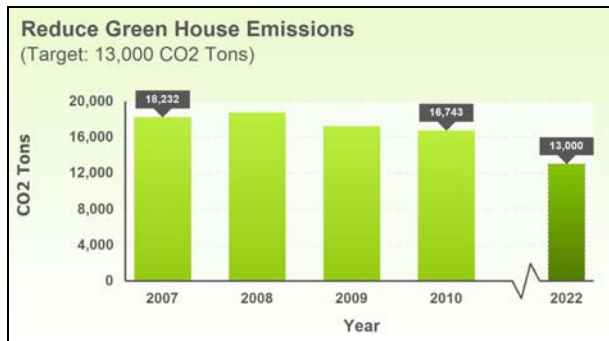
Performance Metrics



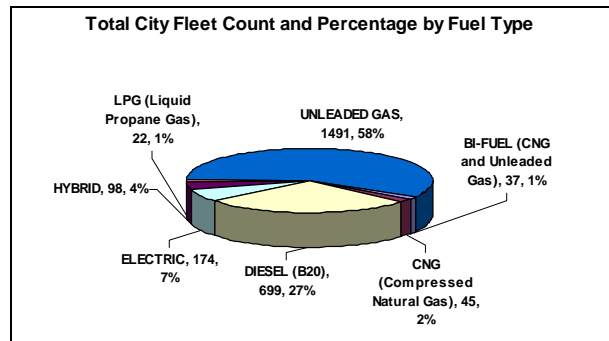
2009: 41% of the fleet ran on alternative fuels. 42% includes a 1.7% size reduction of the fleet under the Green Fleet Policy.



2010 fuel consumption decreased by 69,545 gallons since 2009: 1,271,311 gallons.



Calculation represents a 28% reduction when compared to 2002-03 baseline. 2009 City fleet emissions: 17,217 CO2 Tons.



There are 33 more alternative fuel vehicles in the inventory this reporting period.

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

Trees and improved streetlights will bring significant environmental and social benefits to the City of San José. Trees provide shade, reduce air conditioning bills, filter air pollutants, and boost property values while smart, zero emission streetlights will improve the quality of light on the City's streets and reduce associated CO2 emissions.



Westwood Neighborhood

Achievements & Successes

Community Forest Program:

In 2010, work continued on developing a comprehensive Community Forest program. This work includes refinements to the Street Tree Ordinance of the San José Municipal Code and the continuation of a project to inventory all of the street trees and vacant planting sites throughout the City.

Street Tree Inventory: In July 2009, sixteen 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. Over 50% of the street tree inventory has now been completed. Grant applications have been submitted toward funding much of the remaining areas of the City that still need to be inventoried. It is expected that the inventory will likely take three or more years, depending on funding, to complete.

Our City Forest Community Tree Bank and Training Center: Our City Forest is in the process of developing a tree nursery which will increase their capacity to provide street trees for Green Vision plantings. By being in control of the selection of the tree species to propagate, they will be able to produce species that are well adapted to the climate of San José and experiment with promising new selections that are not available in the general nursery trade. The facility will also provide a base for teaching residents and landscape professionals on planting techniques.

CDBG Tree Planting Project: The Department of Transportation received a Community Development Block Grant to fund a tree planting project in low to moderate income neighborhoods on the eastside of San José. These neighborhoods tend to have a deficit in tree canopy, which can lead to higher summer temperatures, lower property values, and less shaded sidewalks, and making walking around

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/>.

the neighborhood a less pleasant option. The grant funding helped the City do community outreach and in partnerships with Our City Forest, plant 417 street trees. In addition, the funding also allows for watering of the trees for two years so that they are assured to have a good start towards improving the tree canopy in the targeted neighborhoods.

LED Streetlight Installations: In 2010, the City installed 150 “smart” LED streetlights in an industrial area in North San José. In this context, “smart” refers to streetlights equipped with a remote monitoring and adaptive control system capable of modulating the output of the light and measuring its energy consumption. This deployment and the 118 streetlights installed in 2009 in a residential area in East San José allowed the City to test two different network control systems. The City also installed 24 pedestrian-scale LED and induction streetlights on 24th Street as part of a pilot to evaluate different types of broad-spectrum (“white”), energy-efficient lighting technologies for pedestrian streetlights.

In March 2010, a consultant hired by the City organized a two-day streetlight demonstration and study to systematically gather information on different streetlight technologies and the public’s subjective and objective response to those lights at different lighting levels. The study compared LED streetlights to induction, LPS and HPS. It also allowed the City to test a third network control system and refine its specifications for future installations.



Associated Lighting Representatives - Hadco Evolaire LED Streetlights at Night

With \$2.9 million in federal funding – \$694,000 in conventional CDBG funds and \$2.2 million of Recovery Act funding: Community Development Block Grant - Recovery (CDBG-R) and the Energy Efficiency Community Block Grant (EECBG) – the City plans to replace approximately 2,200 more lights in the next two years. All of these lights will be equipped with a remote monitoring and adaptive control system. Staff has solicited input from all the council offices and the Strong Neighborhoods for recommended locations for upcoming conversions.

To realize the financial benefit of dimming, the City will need to reach resolution with Pacific Gas & Electric (PG&E) on how the data generated by its network control system can be used for billing purposes. The City has been in discussions with the utility on how that might be accomplished.

Streetlighting Design Guides: To fully implement the new Public Streetlighting Policy adopted

DOE Municipal Solid-State Street Lighting Consortium: The City of San José is a member of the DOE Municipal Solid-State Street Lighting Consortium which represents a coordinated effort among interested cities, power providers, government entities and others to share technical information and experiences related to LED street and area lighting demonstrations. The Consortium also serves as an objective resource for evaluating new products on the market and valuable field experience and data for buying and implementing high-quality, energy-efficient LED street and area lighting. The City is chairing the Consortium’s Remote Monitoring and Adaptive Controls Task Force. To learn more, please visit: <http://www1.eere.energy.gov/buildings/ssl/consortium.html>.

in December 2008, the City must adopt an adaptive lighting design guide that will identify where, when and by what degree the City can vary the lighting level of its streetlights. A draft adaptive lighting design guide, along with design guides for the installation of new and replacement streetlights will go to the Council for approval in early 2011. Those guidelines were informed in part by the two-day streetlight demonstration and study conducted by the City in March 2010.



Associated Lighting Representatives - Hadco Evolaire
LED Streetlights

Advocacy

The California Public Utility Commission's (CPUC) revised its un-metered streetlight tariff to include LED streetlights in Summer 2009. However, to realize the financial benefit of dimming, the City will need to reach resolution with PG&E on how the data generated by its remote monitoring and adaptive control system can be used for billing purposes. In October 2010, the City submitted testimony in PG&E's General Rate Case recommended the creation of a new streetlight rate schedule that would utilize data generated by the City's control system for billing purposes. The legal proceeding on this is likely to be completed in early 2011. (This topic was addressed in the August 27, 2010 T&E memo "LED Streetlight Conversion Progress Report.")

Strategic Direction

Staff continues to face budget challenges into 2011 making it extremely difficult to achieve substantial progress on Green Vision goal 9 to plant 100,000 new trees and replace 100% of all 62,000 streetlights with smart, zero emission lighting. In 2011 for trees, staff will continue to seek funding to complete the street tree inventory effort, explore feasibility of in-fill plantings as part of the downtown tree pilot program in partnership with downtown businesses, and begin scoping a workplan on urban vegetation as part of Lawrence Berkeley National Laboratory's (LBNL) Cool Cities pilot. For streetlights, staff will install 2,200 more lights in the next two years as a result of \$2.9 million in federal grant funding, seek resolution with PG&E on a method to use the data generated by its remote monitoring and adaptive control system for billing purposes, and continue to seek grant funding for more streetlight conversions.

Climate Change

Trees provide multiple benefits with regards to Greenhouse Gas (GHG) emissions. Trees remove carbon dioxide from the air and provide shade that helps mitigate heat and reduces energy needed to cool the air. In 2010, 4,469 trees were planted in San José. GHG emissions sequestered from these additional 1,889 trees planted in 2010 approximated to 174 MT CO₂e using the Environmental Protection Agency's formula for trees, assuming these trees will survive for 10 years.



Kinghurst Dr

San José installed 174 Light Emitting Diode (LED) streetlights that offer a significant reduction in energy demand for lighting along with greater illumination. These new lights due to their remote dimming capability could save even more energy if that function is used and are expected to last up to 20 years. It is estimated that the energy saved by these smart lights is 49,272 kwh resulting in a reduction of GHG emissions of approximately 22 metric tons of CO₂ equivalents.

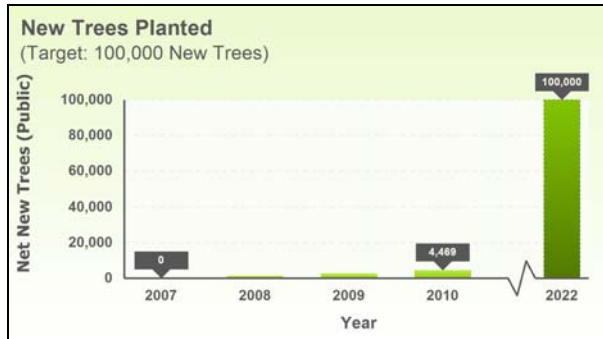
Work Plan

Strategic Focus	Proposed Strategy	2010 Work Plan	2011 Work Plan
Lead by Example			
Reduce Citywide streetlight energy consumption.	Develop streetlight design guide that will guide the city when it replaces existing lights, installs new lights, and dims lights during off-peak hours.	<p>Conduct demonstration and study comparing LED streetlights with other lighting technologies and evaluate dimming.</p> <p>Develop design guides.</p> <p>Status: Demo and study completed. Draft design guides are near completion.</p>	<p>Council adoption of Streetlight design guides in winter 2011.</p> <p>City Council adoption of amended Outdoor Lighting on Private Developments policy consistent with the Streetlight Master Plan.</p> <p>Install 2,200 more lights in the next two years as a result of \$2.9 million in federal grant funding.</p>
Advocating Policies			
Change State regulation to allow cost effective metering of individual lights.	Advocate CPUC regulatory changes.	<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> <p>Status: Entered into dialogue with PG&E on possible demonstration project. Filed testimony in PG&E General Rate Case before CPUC.</p>	<p>Resolve method of using data generated by network control for billing purposes with PG&E and CPUC so City receives financial benefit of dimming.</p> <p>Reach resolution with PG&E on means to use data on streetlight energy consumption generated by the City's remote monitoring and adaptive control system for billing purposes.</p>
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>Report to Council in Spring on financing strategies the City could pursue to fund additional conversion projects.</p> <p>Status: Report</p>	<p>Continue to seek grant funding for conversions.</p> <p>Revisit question about financing larger scale conversion.</p>

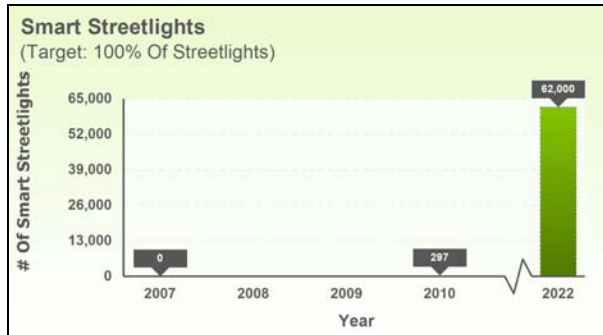
Strategic Focus	Proposed Strategy	2010 Work Plan	2011 Work Plan
		recommended that City continue to rely on grant funding for another year. Rapid efficiency increases and price reductions for LED streetlights may make financing practical in near future.	
Strategic Partnerships			
Expand, maintain, and 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.	<p>Continue progress on finishing the complete street tree inventory effort.</p> <p>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.</p> <p>Status: Over 50% of the street tree inventory has been completed. Inventory grants have been submitted to fund the continued street tree inventory. Work is progressing on updating the Street Tree Ordinance of the Municipal Code. Increased efforts with Our City Forest and the CIP database made to track tree plantings.</p>	<p>Continue progress on finishing the complete street tree inventory effort by seeking grant funding and using existing City resources and Our City Forest.</p> <p>Complete and evaluate Year One of the downtown Tree Maintenance Pilot Program, and explore feasibility of in-fill plantings with the Downtown Association as part of the Property-Based Improvement District tree maintenance partnership.</p>
Leverage partnerships to research heat island effect and determine priority areas to develop the community urban forest tree canopy.	Partner with LBNL, for data support, planting demonstration projects, and ties to energy efficiency measures.	NA	<p>Scope work plan along with other City staff from OED and ESD on urban vegetation as part of LBNL's Cool Cities pilot.</p> <p>Partner on funding opportunities.</p>
Power existing streetlights with renewable energy.	Partner with private entities to develop cost-effective method to adapt existing	Develop a strategy to backfill City's streetlight energy requirements with renewable energy.	Develop a strategy to backfill City's streetlight energy requirements with renewable energy.

Strategic Focus	Proposed Strategy	2010 Work Plan	2011 Work Plan
	streetlights to capture and use renewable energy.	Identify potential partners to demonstrate the viability of solar cooling stations to power streetlights. Status: Postponed action due to resource limitations.	

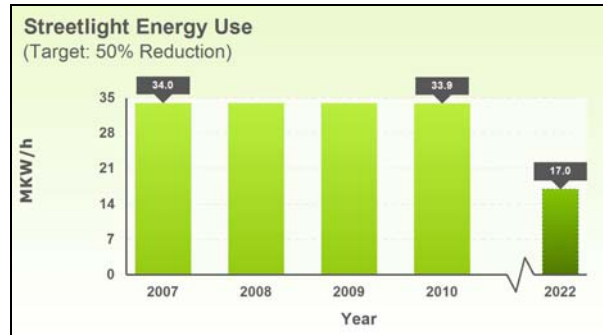
Performance Metrics



2009: 2,580 trees



2009: 125 smart streetlights



2009: 34 kWh (millions)

Create 100 Miles of Interconnected Trails

San José planned 100-mile trail network will be developed primarily along creeks and rivers, opening access to some of the City's most scenic corridors. In addition, 400 miles of on-street bikeways are also planned to complement and enhance the interconnectivity of the trail network.



Guadalupe River Trail

Achievements & Successes

According to the U.S. Census, in the last four years, the percent of San José trips by bike has increased 125% and is currently 50% above the national average. Almost 1,500 people use trails through downtown San José each weekday with a 5.6% increase in traffic documented as part of the annual Trail Count conducted in September 2010. A total of 0.33 miles of trail were added to the inventory with completion of the Lower Silver Creek Trail (Silverstone Place) in east San José. Construction of the Guadalupe River Trail from Woz Way to Virginia Street is nearing completion and 0.42 miles of trail will be open in early 2011. Funding is currently in place to master plan and design an additional 15 miles of new trails. Staff continues to monitor funding from local, state and federal sources to develop the remaining trails that will lead to a 100-mile interconnected trail network. In 2010, eight bike lane projects totaling five miles were completed and 200 bike racks were installed providing 400 new bike parking spaces. The Federal Highway Administration in partnership with the American Planning Association has awarded a Transportation Planning Excellence Award to San Jose's Trail Program for its comprehensive approach to trail development. The American Trails organization awarded San Jose the "State of the Art" award for its Milestone Marker project currently being deployed in order to support more rapid emergency response and recordkeeping.

Trail Improvements:

- Construction and environmental documents for paving 6.4 miles along the Lower Guadalupe River Trail have been completed.
- Lower Silver Creek Trail (Silverstone Place) adds 0.33 mile to the Trail Network.
- Program staff attended and made technical presentations about trail development at the 20th Annual National Trails Symposium, 25th and Annual California Trails and Greenways Conference and the Urban Pathways to Livable Committees conference.

Easy Actions You Can Take Now

1. Try taking your bike to work or school by the trail and/or bike lane system once per week. Plan your trip using the Trail website: www.sjparks.org/Trails.
2. Educate your State and Federal representatives about the importance of grant funding for trail development in San José to support recreation and commuting.
3. Join local and national advocacy groups like the Silicon Valley Bicycle Coalition, Friends of the Guadalupe River Park & Gardens, and American Trails Organization because their work supports development and operation of local trails.

Special Designations & Awards:

- The American Trails' 20th Annual National Trails Symposium honored San José with its State-of-the-Art Technology Award for the Trail Signage and Mileage Marker Guidelines and deployment.
- The Federal Highway Administration (FHWA), Federal Transit Administration and the American Planning Association honored San José with the Transportation Planning Excellence Award for San José's multi-faceted approach to trail development.
- Additionally, San José also received the Exemplary Human Environment Initiatives (EHEI) Award from the FHWA in the Encouraging Non-Motorized Transportation category.
- The California Trails and Greenways Conference honored San José with an Award of Merit for the Albertson Parkway project.
- American Trails honored staff photographer Yves Zsutty for an image of a morning commute along the Guadalupe River Trail, as part of the Urban Trails and Greenways category.
- California Parks and Recreation Society honored San José with an Award of Achievement for Coyote Creek Trail (Tully Road to Los Lagos Golf Course).
- San José recognized by Forbes Magazine as the 10th least stressful city, with abundant access to nature noted as an important factor.
- San José recognized by CNN Money as the 7th best place for a healthy retirement. The Coyote Creek Trail was the banner image.

Grant Funding: In 2010, staff submitted applications for \$21,670,000 in trail grant funding. To date, \$1.75 million in trail grants has been secured. During 2010, over \$3.9 million in funding for on-street bike and pedestrian improvements has been obtained, including \$1.5 million for bike-friendly traffic signal testing and installation, \$1.4 million for San Fernando Colored Bike Lanes, \$568,000 for Safe Routes to School bike and pedestrian improvements, \$379,000 for on-street bikeway implementation; and \$25,000 for public bike rack installation.

The Trail Count Survey: On September 15, 2010, the City, in partnership with community volunteers and non-profit organizations such as the Silicon Valley Bicycle Coalition and Friends of the Guadalupe River Park Conservancy, conducted the annual Trail Count Survey. Results showed a 5.6% increase in the use of Guadalupe River Trail during a 12-hour count period – the count station at Coleman Avenue has been used for the past 4 years and has



Volunteer Spotlight: On August 5, 2010, the City Parks, Recreation and Neighborhood Services (PRNS) department and 865 volunteers from KPMG and Beta Alpha Psi spent 3 hours weeding, seeding, planting and composting all along the downtown Guadalupe River Trail. Working in groups of twenty-five, each team was guided from Grant Street to Coleman Avenue (a distance of 1.5 miles). Volunteers worked quickly on both sides of the river gathering debris while City trucks kept up with the fast pace of this energetic group. The volunteers finished up knowing that they helped make the downtown urban trail cleaner and safer for all to enjoy!

reported increasing usage over the entire period. A summary of the report can be found at <http://www.sjparks.org/Trails/TrailCount.asp>.

Strategic Direction

Strategic efforts in 2011 will focus on corporate partnerships, implementing the Trail Watch program, and further develop the signage program guiding cyclists from the on-street bikeways to the off-street trail system.

Climate Change

Use of our interconnected trail network allows more people to use either biking or walking as an alternative mode of transit versus conventional fossil fueled vehicles to commute each day. By developing our trails and bikeways, the City will reduce the amount of Greenhouse Gas (GHG) emissions produced from the transportation sector, one of the largest and most difficult sectors to address. In the Bike Plan 2020, a goal of a 5% bike mode share was developed on comparison with other cities. In lieu of annual surveys, a methodology is being used to assume a small but linear growth in bike ridership each year from the 2007 baseline year. This method was vetted with a climate scientist at San José State University and provides a reasonable estimate of GHG emissions. Since the baseline year, approximately 15,090 metric tons of CO₂ equivalents have been reduced from the transportation sector.



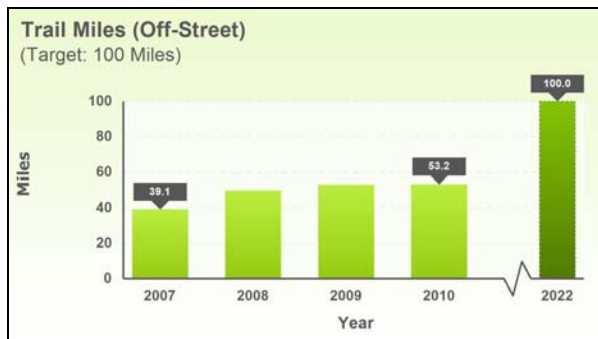
Inaugural ViaVelo: On May 15, 2010, in conjunction with the Silicon Valley Bicycle Coalition, the City of San José hosted the Mattson Technology ViaVelo. This urban street fair opened San Fernando Street to people providing a car-free environment to bike, walk, dance and enjoy. The festival included children’s activities, live music, information booths and more. Approximately 5,000 people turned out for this family-oriented event.

Work Plan

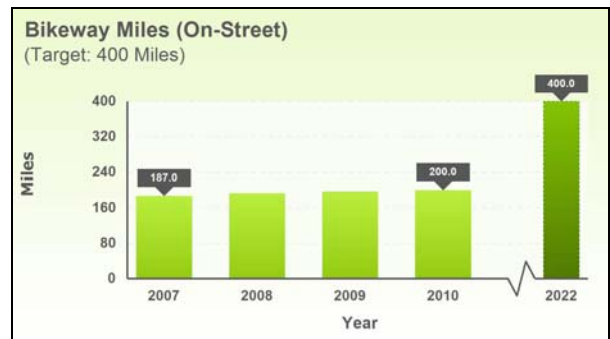
Strategic Focus	Proposed Strategy	2010 Work Plan	2011 Work Plan
Lead by Example			
Expand City’s bike network.	Implement “Bike Plan 2020”, the council-approved citywide bike plan.	Install 10 miles of bikeways. Install 500 public bike parking spaces. Status: 5 miles of bike lanes, 400 bike parking spaces completed.	Install 10 miles of bike lanes, bike routes and bike boulevards. Install 500 public bike parking spaces.
Financing Mechanisms			
Fund expansion of trail network.	Work with regional, state, federal and private entities to	Seek Council direction to pursue every applicable grant opportunity for trail	Continue to seek Council direction to pursue every applicable grant

Strategic Focus	Proposed Strategy	2010 Work Plan	2011 Work Plan
	secure funding and sponsorship.	development. Grant programs will be brought to the attention of Council as programs are announced by various funding agencies. Status: City Council directed staff to pursue \$21,670,000 in grant funding. So far \$1.75 million has been secured.	opportunity for trail development.
Strategic Partnerships			
Expand and maintain trail network through partnerships.	Establish partnerships with non profits and private entities.	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. Status: The Trail Watch program will be an adjunct to existing Adopt-A-Trail program and a list of tasks and duties is being finalized.	Implement Trail Watch program.

Performance Metrics



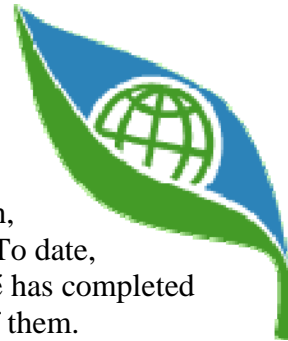
2009: 53 miles
Revised baseline reflects updated trail inventory with more precise measurement of Coyote Creek Trail system.



2009: 197 miles
Revised baseline number reflects updated inventory of facilities conducted by City of San José's Department of Transportation.

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
Action 1: 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 Action Plan (2010) 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.
Action 2: 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.
Action 4: 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 Convert Waste to Energy</i> for more information.
Action 6: 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. The 2009 CalRecycle Report estimates that San José achieved an overall recycling rate of 70% in FY 09-10. See the chapter <i>Divert 100% of Waste from Landfills and Convert Waste to Energy</i> for more information.
Action 7: 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</i>

Urban Environmental Accords Action	Related Initiatives or Policies
	<i>or Retrofit 50 Million Square Feet of Green Buildings</i> for more information.
Action 8: 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 José 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.
Action 9: Adopt a policy or implement a program that creates environmentally beneficial jobs in slums and/or low-income neighborhoods.	San José's Work2Future program is working closely with numerous non-profits with similar goals. Its Green Cadre program trained and placed 50 young people in environmental internships in early 2010. 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> .
Action 12: 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 José.
Action 14: 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. 42% of the City's vehicle fleet consists of alternative fuel vehicles. The diesel fleet runs on biodiesel-20. The fleet now includes a hybrid dump truck as well as a plug-in hybrid. See the Chapter on <i>Ensure that 100% of public fleet vehicles run on alternative fuels</i> .
Action 18: 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 i.e. through its Regional Ozone Plan and the "Spare the Air Days". The City participates in BAAQMD workgroups and a City Council-member sits on the BAAQMD Board of Directors.
Action 19: 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 and has broken ground on an Advanced Water Treatment Facility for recycled water.
Action 20: 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. San José entered into an agreement with the Santa Clara Valley Water District to construct an Advanced Water Treatment Facility for recycled water

Urban Environmental Accords Action	Related Initiatives or Policies
	and began construction in 2010.
Action 21: Adopt municipal wastewater management guidelines and reduce the 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	<ul style="list-style-type: none"> • The City owns and operates a tertiary Water Pollution Control Plant. It does not discharge any untreated municipal wastewater to local receiving waters. • The City currently recycles approximately 13% of its treated wastewater during the dry weather period 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 José 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.

Below are some highlights of what was achieved in 2010 to implement the Accords:

Urban Environmental Accords Action	2010 Achievements and Milestones	Next Steps
<i>Energy</i> 1. Renewable Energy 2. Energy Efficiency 3. Greenhouse Gas Reductions	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.	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.
<i>Waste Reduction</i> 4. Zero Waste 5. Ban a Nonrenewable product from the City 6. Recycling Programs	See the <i>Divert 100% of Waste from Landfills and Convert Waste to Energy</i> chapter. In support of Action 5, the City is working to ban plastic and paper bags from distribution by City retailers by January 1, 2012 (excluding restaurants). The City's diversion rate was over 66% in 2010.	See the <i>Divert 100% of Waste from Landfills and Convert Waste to Energy</i> chapter. The bag ban ordinance is expected to be adopted on December 14, 2010.
<i>Urban Design</i> 7. Municipal Green Building 8. Smart Growth 9. Green Jobs	2010 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>	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> .

Urban Environmental Accords Action	2010 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 existing, or proposed parkland, schoolyard, trail, and/or other recreational open space as noted in the City's Greenprint. There are 51 areas in the City that do not comply with Action 10, equating to approximately 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 José 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 José is leading the following efforts in 2010:</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 José Project. • Completed MOU with the Santa Valley Transportation Authority to proceed with engineering and design of the Bus Rapid Transit Project. • Completed the Alternative Alignment Development Process for the California High Speed Rail Project. • Completed the City Bike Master Plan to increase bike commuting to 5%. • Initiated consultant 	<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 José. • Complete Draft Environmental Clearance for the California High Speed Rail project. • Promote Central Valley to Silicon Valley connection to High Speed Rail Phase 1 • Complete RFP process for the Automated Transit or "POD Car" Network.

Urban Environmental Accords Action	2010 Achievements and Milestones	Next Steps
	<p>selection process for the development of the Automated Transit/POD Car Network.</p>	
<p><i>Environmental Health</i> 16. Municipal Environmental Procurement 17. Local Organic Foods 18. Air Quality</p>	<ul style="list-style-type: none"> • The City’s Public Works Department has been transitioning to more environmentally sound construction materials such as porous concrete, recycled content concrete (with fewer greenhouse gas emissions) and rubberized asphalt that uses waste tires. • The Airport has transitioned their restrooms to the use of rechargeable batteries which reduce hazardous waste significantly and save money. • LEED certification has been achieved in part with innovation credits for green procurement. • The Convention Center and Senior Meal Program continue to procure local organic foods. • The Air District has established a new <i>Threshold of Significance</i> for toxic air contaminants including greenhouse gases. These will affect the City’s planning processes. For the most part, Bay Area ozone levels improved in 2010 over 2009. 	<ul style="list-style-type: none"> • Continue to work with City Departments and the procurement division to incorporate environmental specifications into upcoming solicitations. • Continue to educate City staff about the policy and green alternatives to products currently being procured. • Where possible, expand the use of local organic foods. • The City will determine how to address the new toxic air thresholds through the General Plan update process.
<p><i>Water</i> 19. Water Conservation 20. Water Quality Protection 21. Recycled Water and Watershed Management</p>	<p>The City is in its third year of implementing a citywide water conservation plan. This includes a cost-sharing agreement for indoor water conservation programs such as incentives for water-efficient retrofits, and conducting outreach to educate the public. Average Daily Water Use in San José is currently an estimated 121</p>	<p>Continue to reduce per capita water use through the implementation of indoor water conservation programs, and conduct outreach for indoor and outdoor water efficiency.</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</p>

Urban Environmental Accords Action	2010 Achievements and Milestones	Next Steps
	gallons per person per day (compared to 147 when the Green Vision was adopted in 2007).	enforcement; 2) require water-efficient landscaping in new development. For an update on recycled water activity, see the chapter on <i>Recycle or Beneficially Reuse 100% of Wastewater</i> .

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. The main focus of Green Cities California in 2010 was on plastic bag bans.

Glossary

Abbreviation	Description
AB	Assembly Bill
AD	Anaerobic Digestion
AWT	Advanced Water Treatment Facility
BAAQMD	Bay Area Air Quality Management District
BACT	Best Available Control Technology
BART	Bay Area Rapid Transit
BIG	Build it Green
CAL FIRE	California Department of Forestry and Fire Protection
CALGreen	California Green Building Standards Code
CARB	California Air Resources Board
CCA	Community Choice Aggregation
CDBG	Community Development Block Grant
CDBG-R	Community Development Block Grant – Recovery
CDDD	Construction Demolition Diversion Deposit Program
C&D	Construction and Demolition
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CFL	Compact Fluorescent Light
CMS	Content Management System
CNG	Compressed Natural Gas
CO ₂ e	Carbon Dioxide Equivalents
CPUC	California Public Utilities Commission
CSI	California Solar Initiative
CTDC	Clean Tech Demonstration Center
CTI	Cooling Tower Initiative
CTO	Clean Tech Open
DOE	Department of Energy
DPF	Diesel Particulate Filter
DWR	California Department of Water Resources
EDA	Economic Development Agency
EECBG	Energy Efficiency and Conservation Block Grant
EIC	Environmental Innovation Center
EIR	Environmental Impact Report
EP3	Environmentally Preferable Procurement Policy
EPP	Environmentally Preferable Procurement
EPR	Extended Producer Responsibility
ETDC	Electronic Transportation Development Center
EUC	Energy Upgrade California
EV	Electric Vehicle
FERC	Federal Energy Regulatory Commission
FHWA	Federal Highway Administration
FITs	Feed-in-Tariffs
GCC	Green Cities California
GEELA	Governor’s Environmental and Economic Leadership Award
GHG	Greenhouse Gas
GPCD	Gallons per Capita per Day
HHW	Household Hazardous Waste
ICMA	International City/County Management Association
i-Hub	Innovation Hub
J/ER	Jobs-to-Employed Ratio
K-12	Kindergarten Through 12 Grade

Abbreviation	Description
kW	Kilowatt
LBNL	Lawrence Berkeley National Lab
LED	Light Emitting Diode
LEED	Leadership in Energy and Environmental Design
LEED-EB	Leadership in Energy and Environmental Design for Existing Buildings
LEED-NC	Leadership in Energy and Environmental Design for New Construction
LPG	Liquid Propane Gas
MPG	Miles Per Gallon
MW	Megawatt
MGD	Million Gallons Per Day
MMT	Million Metric Tons
MT	Metric Tons
MTC	Metropolitan Transportation Commission
NOx	Nitrogen Oxide
NCU	Neighborhood Clean Up
OCF	Our City Forest
PACE	Property Assessed Clean Energy
PG&E	Pacific Gas and Electric
PM	Particulate Matter
PPA	Power Purchase Agreement
PV	Photovoltaic
RAFT	Resource Area for Teaching
RES-BCT	Renewable Energy Self-Generation Bill Credit Transfer
RFI	Request for Information
RFP	Request for Proposals
SB	Senate Bill
SBWR	South Bay Water Recycling
SCVWD	Santa Clara Valley Water District
SJ	San José
SJRA	San José Redevelopment Agency
SSV	Sustainable Silicon Valley
TDS	Total Dissolved Solids
UC	University of California
USBR	United States Bureau of Reclamation
USGBC	United States Green Building Council
VALE	Voluntary Airport Low Emission
VC	Venture Capital
WPCP	San José/Santa Clara Water Pollution Control Plant

Appendix A – Comprehensive Work Plan

Leading by Example

Strategic Focus	Proposed Strategy	2010 Work Plan	2011 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.	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. Status: Economic Development Strategy Update completed, General Plan Update and WPCP Master Plan in progress.	Develop and use data and analysis to identify industry clusters, target policy, and track performance.
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 José facilities.	Deploy demonstration projects in City owned buildings and land to support commercialization of clean technologies. Status: Ongoing.	Deploy demonstration projects on City owned buildings and land, and community-wide to support commercialization of clean technologies.
3. Greening of small businesses through BusinessOwnersSpace.com. (25,000 Clean Tech Jobs)	Launch resources to support greening of small businesses.	Develop a new Green Resource page on BusinessOwnerSpace.com. Status: Ongoing.	Develop an outreach strategy within the BusinessOwnerSpace partner network to implement Green Resource tool.
4. Identify green employment trends and opportunities. (25,000 Clean Tech Jobs)	Develop Silicon Valley Emerging Green Study – San José in partnership with work2future and NOVA.		Complete and publish a study of workforce development needs and opportunities in emerging sectors of the Silicon Valley green economy.

Strategic Focus	Proposed Strategy	2010 Work Plan	2011 Work Plan
5. Implement energy efficiency projects in City facilities. <i>(50% Energy Reduction)</i>	<p>Partner with PG&E to conduct audits; identify additional sources of funds for energy efficiency projects.</p> <p>Use federal and other financing sources for energy efficiency installations.</p>	<p>Complete 35 energy audits and related energy efficiency projects.</p> <p>Reduce municipal energy use by 5%.</p> <p>Status: Completed 22 energy audits and 20 energy efficiency projects. Reduced municipal energy use by 10% from previous year*</p> <p><small>*Comparison is 2009 to 2008 data due to lag time for PG&E data availability.</small></p>	<p>Complete 35 energy-efficiency projects.</p> <p>Reduce municipal energy use by 5% from previous year.</p>
6. Install Solar on City Facilities. <i>(100% Clean, Renewable Electricity)</i>	<p>Power Purchase Agreement RFP finalized and available for all City facility solar projects; remove barriers to solar installation for all City facilities.</p>	<p>Bring negotiated PPA for 1.3 MW at Central Service Yard to Council in early 2010 and install systems by Summer 2010.</p> <p>Develop a comprehensive strategy for the remaining MWs and bring forward to Council in Spring 2010.</p> <p>Status: Comprehensive strategy adopted by Council in May 2010.</p> <p>1.3 MW solar photovoltaic installation at the Central Service Yard planned for completion by 2011. Strategic Energy Action Plan presented to City Council in May 2010.</p> <p>12MW solar RFP for 38+ city facilities released.</p>	<p>Complete analysis of, and prepare recommendations for additional municipal solar installations as based on submitted proposals.</p>

Strategic Focus	Proposed Strategy	2010 Work Plan	2011 Work Plan
7. Implement Private Sector Policy for New Construction. (50 Million Sq. Ft. of Green Building)	<p>Evaluate effectiveness of Policy by monitoring number of projects obtaining Green Building Certification.</p> <p>Policy modifications or Deposit increase may be necessary to increase levels of Green Building.</p>	<p>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.</p> <p>Status: Policy revision determined not to be necessary. Delaying requirements for retrofits and rehabs to account for time needed for preparation and implementation of new CALGreen requirements.</p>	<p>Track implementation of the Green Building Policy for new construction in the context of the new CALGreen code to inform future policy refinement and development.</p>
8. Certify existing City facilities using LEED-EB Rating System. (50 Million Sq. Ft. of Green Building)	<p>Participate in USGBC Portfolio Program.</p>	<p>Prepare four City buildings for certification under LEED-EB Portfolio Program.</p> <p>Plan for LEED-EB certification of additional City facilities.</p> <p>Submit Portfolio Program pre-certification package to USGBC.</p> <p>Status: Submitted pre-certification package to USGBC 12/31/10.</p>	<p>Certify four City buildings under LEED-EB Portfolio Program.</p> <p>Evaluate strategy to certify additional city facilities under the Portfolio Program.</p>
9. Advance Commercial Redesign. (Zero Waste & Waste to Energy)	<p>Negotiate contracts that comply with City policy and help the City meet green vision policies including reduced green house gas impacts, increased diversion, and the opportunity to create renewable energy from</p>	<p>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.</p> <p>Status: In Progress –2 RFPs</p>	<p>Provide award recommendations to Council.</p> <p>Complete franchise negotiations.</p> <p>Begin transition process to new exclusive franchise haulers.</p>

Strategic Focus	Proposed Strategy	2010 Work Plan	2011 Work Plan
	organic wastes. Proposed system solutions should provide cost efficient services and incentives for long term infrastructure development.	issued, proposals received and in final evaluation stage. Staff recommendations to go to Council in March 2011.	
10. Streamline Construction Demolition Diversion Deposit (CDDD) program. (<i>Zero Waste & Waste to Energy</i>)	Develop new program/reporting requirements for C&D facilities.	Implementation of CDDD proposed modifications. Status: Completed	
11. Maximize diversion and safe disposal opportunities for residents. (<i>Zero Waste & Waste to Energy</i>)	Test and evaluate strategies to enable residents to divert additional materials safely and conveniently.		Complete RecyclePlus pilot programs and evaluate results. Evaluate options for expansion of the neighborhood clean up (NCU) program. Pursue New Markets Tax Credit to complete Phase II funding. Begin Phase II construction of San José Environmental Innovation Center in early Summer 2011 to provide permanent San José Household Hazardous Waste (HHW) collection site.
12. 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.	Develop policies and programs to reduce litter. Status: Ongoing. Submit EIR to Council for finalization and ordinance to Council for adoption in Spring 2010. Status: EIR Completed.	Develop policies and programs to reduce litter. Submit ordinance to Council for adoption in Spring 2011. Initiate transition to support new ordinance.

Strategic Focus	Proposed Strategy	2010 Work Plan	2011 Work Plan
		<p>Initiate transition to support new ordinance.</p> <p>Status: Will begin in 2011.</p> <p>Implement Bring Your Own Bag Campaign.</p> <p>Status: Completed.</p>	
13. Increase waste diversion at San José schools. <i>(Zero Waste & Waste to Energy)</i>	Provide education and assistance to schools about starting and growing recycling programs.		<p>Complete pilot Green Star School certification program.</p> <p>Launch Green Star School certification program.</p>
14. Drive large San José events toward Zero Waste. <i>(Zero Waste & Waste to Energy)</i>	Provide education and assistance to event organizers and food vendors to increase waste diversion.		Develop comprehensive educational tools for zero waste event organizers.
15. Expand uses of Recycled Water. <i>(Recycle or Beneficially Reuse Wastewater)</i>	Re-evaluate and create criteria for new developments in the vicinity of SBWR pipeline alignments.	<p>Continue to work with the development industry to craft an appropriate ordinance.</p> <p>Status: Pending.</p>	Incorporate industry suggestions from 2010 outreach into revised ordinance and re-propose to Transportation and Environment Committee.
16. General Plan Update. <i>(Sustainable General Plan)</i>	Complete Envision San José 2040 General Plan Update.	Finalized Preferred Land Use Scenario and Draft Plan policies.	Complete environmental review (EIR) and adopt General Plan Update, including Goal #7 Sustainability Measures.
17. 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 alternative vehicle manufacturers who offer purpose built patrol vehicles.</p> <p>Introduce available hybrid technology into the larger heavier</p>	<p>Implement MTC and CEC Grant projects.</p> <p>Complete the evaluation / pilot process of purpose built patrol vehicles. Develop an updated procurement specification for the new vehicle standard.</p>

Strategic Focus	Proposed Strategy	2010 Work Plan	2011 Work Plan
		<p>diesel powered fleet complement.</p> <p>Status: The vehicle review committee continues to evaluate purpose built patrol vehicles including the Ford Taurus, Chevrolet Caprice. Both models to be released in 2011.</p>	
<p>18. Reduce Citywide streetlight energy consumption. (100,000 Trees & Zero Emission Lights)</p>	<p>Develop streetlight design guide that will guide the city when it replaces existing lights, installs new lights, and dims lights during off-peak hours.</p>	<p>Conduct demonstration and study comparing LED streetlights with other lighting technologies and evaluate dimming.</p> <p>Develop design guides.</p> <p>Status: Demo and study completed. Draft design guides are near completion.</p>	<p>Council adoption of Streetlight design guides in winter 2011.</p> <p>City Council adoption of amended Outdoor Lighting on Private Developments policy consistent with the Streetlight Master Plan.</p> <p>Install 2,200 more lights in the next two years as a result of \$2.9 million in federal grant funding.</p>
<p>19. Expand City's bike network. (100 Miles of Interconnected Trails)</p>	<p>Implement "Bike Plan 2020", the council-approved citywide bike plan.</p>	<p>Install 10 miles of bikeways.</p> <p>Install 500 public bike parking spaces.</p> <p>Status: 5 miles of bike lanes, 400 bike parking spaces completed.</p>	<p>Install 10 miles of bike lanes, bike routes and bike boulevards.</p> <p>Install 500 public bike parking spaces.</p>

Advocating Policies

Strategic Focus	Proposed Strategy	2010 Work Plan	2011 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. <i>(25,000 Clean Tech Jobs)</i>	Expand Fed/State incentives to promote manufacturing and consumer adoption of California products.	Ongoing efforts to support Clean Tech Agenda. Status: SB 71 passed.	Partner with clean tech industry, and regional advocacy groups to develop Clean Tech Legislative Agenda for Silicon Valley.
2. Identify & remove barriers to creating energy improvement areas and smart grids. <i>(50% Energy Reduction)</i>	Work with PG&E, CEC 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.	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. Status: Residential PACE programs were cancelled as a result of federal concerns regarding priority lein rankings. The City and its partners, as well as statewide working groups, are currently developing alternative financing mechanisms.	Support state legislation to enable cities and companies to effectively offer community choices including cool communities, smart meters, and other energy opportunities. Coordinate with local, regional and state agencies in the development and implementation of Energy Upgrade California, the approved State Energy Program providing financial incentives, education, and energy efficiency retrofits. Support and coordinate with statewide partners currently developing alternatives to PACE for residential customers.

Strategic Focus	Proposed Strategy	2010 Work Plan	2011 Work Plan
3. Remove regulatory barriers to widespread adoption of solar. <i>(100% Clean, Renewable Electricity)</i>	Work with CPUC, utilities and others to establish fair, appropriate and reasonable tariffs to encourage expansion of solar.	Implementation of AB2466. Status: Comments provided to PG&E on AB2466 Rate Tariff. Analysis conducted as to potential use of AB2466 on existing city facilities.	Identify other legislative and regulatory opportunities for increasing the use of renewable energy for both the municipal and community sectors. Work to ensure ongoing incentives and rebates for solar projects
4. Monitor State Government. <i>(Sustainable General Plan)</i>	Review proposed legislation and implementation of existing laws related to sustainable land use planning.	On-going review and analysis as needed.	On-going review and analysis as needed.
5. Change State regulation to allow cost effective metering of individual lights. <i>(100,000 Trees & Zero Emission Lights)</i>	Advocate CPUC regulatory changes.	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. Status: Entered into dialogue with PG&E on possible demonstration project. Filed testimony in PG&E General Rate Case before CPUC.	Resolve method of using data generated by network control for billing purposes with PG&E and CPUC so City receives financial benefit of dimming. Reach resolution with PG&E on means to use data on streetlight energy consumption generated by the City's remote monitoring and adaptive control system for billing purposes.

Financing Mechanisms

Strategic Focus	Proposed Strategy	2010 Work Plan	2011 Work Plan
1. Support for incubators and commercialization of clean tech products, and innovation clusters. <i>(25,000 Clean Tech Jobs)</i>	Compete for federal and state funding opportunities to support clean tech sector.	Apply for grants at the federal and state level to support clean technology sector. Status: EDA and E-RIC grants completed.	Continued efforts to access resources to support clean tech industry.
2. Support energy efficiency programs and retrofits. <i>(50% Energy Reduction)</i>	Facilitate collaboration between various community providers to develop new and existing funding mechanisms for energy efficiency improvements. Market existing rebate and incentive programs to increase their uptake rates, particularly among hard-to-reach communities and those facing barriers to clean energy implementation.	Implement Silicon Valley Energy Watch small business and nonprofit audit and retrofit programs. Provide approximately 250 moderate-income homes with energy efficiency education, audits, and direct installation of energy efficiency measures. Status: In the first 10 months of 2010, Energy Watch partners saved over 4 million kWh for Santa Clara County municipal and nonprofit customers, reduced electricity demand by 688 kW, and distributed \$422,000 in rebates. Over 300 small business customers were served through the program. The Energy Watch moderate income residential program will commence January 2011.	Provide approximately 250 moderate-income homes with energy efficiency education, audits, and direct installation of energy efficiency measures. Work with PG&E to identify additional sources of funds to allow expansion of the program beyond pilot phase. Commence both Innovator Pilot programs.

Strategic Focus	Proposed Strategy	2010 Work Plan	2011 Work Plan
3. Support solar programs for rental markets; and other innovative financing mechanisms. <i>(100% Clean, Renewable Electricity)</i>	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.	<p>Conduct outreach to low-income and multifamily property owners on the CaliforniaFIRST program.</p> <p>Status: The CaliforniaFIRST program was to be part of the State Energy Program’s financing initiatives. On July 6, 2010, the Federal Housing Financing Authority reversed their earlier position and that determined that PACE programs presented significant safety and soundness concerns, particularly in the area of the determination of priority liens over existing mortgages. Because of that, the CEC cancelled their funding for PACE programs.</p>	Work with the new Energy Upgrade California, funded by the CEC and others under the State Energy Program to promote financing opportunities for San José sectors.
4. Pursue implementation of clean energy municipal financing for the community. <i>(100% Clean, Renewable Electricity)</i>	Participate in regional efforts and examine development of City-wide clean energy financing.	<p>Bring Resolution to Join the CaliforniaFIRST Program to Council January 2010. If approved, begin Program implementation to San José property owners by Summer 2010.</p> <p>Status: See information on PACE programs in previous work item.</p>	<p>Work with the new Energy Upgrade California, funded by the CEC and others under the State Energy Program to promote financing opportunities for San José sectors.</p> <p>Identify and evaluate other financing opportunities for increasing the use of clean energy.</p>
5. Finance reliable recycled water infrastructure and expansion. <i>(Recycle or Beneficially Reuse Wastewater)</i>	Include recycled water connection fee within sanitary sewer treatment plant connection fee to support infrastructure repair and replacement.	Pursue Integrated Regional Water Management Plan – Prop. 84 funding and Title XVI grant funding through the USBR. Develop local and regional partnerships to develop the use of	<p>Work with USBR to maximize funding opportunities in support of increasing our return on investment and reliability.</p> <p>Assure that SBWR remains a strong presence in California in support of recycled water.</p>

Strategic Focus	Proposed Strategy	2010 Work Plan	2011 Work Plan
	Leverage grant funds to increase reliability and return on investment.	recycled water in the state. Status: In progress.	Support adoption of the new sanitary sewer treatment plant connection fee.
6. Grants. <i>(Sustainable General Plan)</i>	Seek outside funding sources for sustainability planning activity and implementation of the General Plan.	Leveraged General Fund support. Applied for 4 sustainable land use planning grants.	Continue to apply for planning grants in order to support development of Village Plans and other General Plan implementation actions.
7. 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.	Submit applications for grant funding opportunities through AB 118 for expansion of the plug in hybrid fleet and construction of solar charging infrastructure. Status: Successfully landed an MTC Climate Initiative grant to purchase 3 Nissan Leaf electric vehicle and associated vehicle charging infrastructure for the City's Municipal Fleet. These 3 EV's will replace 3 older gasoline powered vehicles.	Collaborate with regional partners in future grant solicitations. Seek grant funding to complete the required work to bring the final complement of Heavy-Duty in compliance with CARB regulations.
8. 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.	Report to Council in Spring on financing strategies the City could pursue to fund additional conversion projects. Status: Report recommended that City continue to rely on grant funding for another year. Rapid efficiency increases and price reductions for LED streetlights may make financing practical in near future.	Continue to seek grant funding for conversions. Revisit question about financing larger scale conversion.

Strategic Focus	Proposed Strategy	2010 Work Plan	2011 Work Plan
9. 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.	<p>Seek Council direction to pursue every applicable grant opportunity for trail development.</p> <p>Grant programs will be brought to the attention of Council as programs are announced by various funding agencies.</p> <p>Status: City Council directed staff to pursue \$21,670,000 in grant funding. So far \$1.75 million has been secured.</p>	Continue to seek Council direction to pursue every applicable grant opportunity for trail development.

Strategic Partnerships

Strategic Focus	Proposed Strategy	2010 Work Plan	2011 Work Plan
<p>1. Coordinate workforce development.</p> <p>Green initiatives for workforce development.</p> <p><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>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>Status: In 2010, in total 188 participants completed a workforce training program related to clean tech jobs.</p>	<p>Continue to partner with workforce training providers to develop clean tech training opportunities.</p>
<p>2. Formation of National Labs Partnership focused on clean technology deployment strategies.</p> <p><i>(25,000 Clean Tech Jobs)</i></p>	<p>Connect Green Vision platform to nationally significant research teams and R&D resources, and commercialization support.</p>		<p>Scope cool technology partnership and form industrial partnerships to support effort.</p>
<p>3. Expand knowledge and awareness of energy efficiency program resources.</p> <p><i>(50% Energy Reduction)</i></p>	<p>Work in partnership with businesses, energy resource providers, Bay Area Air Quality Management District, Santa Clara County and cities, and community organizations to implement coordinated</p>	<p>Implement Silicon Valley Energy Watch energy efficiency education, outreach, and marketing programs.</p> <p>Work with local community partners to implement moderate income energy efficiency program for residents between 200% of</p>	<p>Continue working with County and regional partners to develop and implement the EUC- Santa Clara County program.</p> <p>Implement the Better Buildings Program, a DOE funded whole neighborhood approach to energy efficiency installations and workforce development, coordinated with the City’s Environmental Services, Strong Neighborhoods Initiative, Housing</p>

Strategic Focus	Proposed Strategy	2010 Work Plan	2011 Work Plan
	<p>programs that minimize gaps and redundancies in program delivery.</p> <p>Coordinate with local workforce development and training providers to ensure a robust clean energy workforce that links to utility- and government-funded energy programs.</p>	<p>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>Participate as key partner in the City County Committee to plan local implementation of Energy Upgrade California (EUC).</p> <p>Status: Preliminary planning and neighborhood identification for the Energy Watch moderate income residential program is complete. EUC planning is ongoing; online web portal is live.</p>	<p>Department, work2future, and San José State University.</p> <p>Work with local community agencies to implement the Energy Watch moderate income energy efficiency program in at least four neighborhoods. Work with PG&E and Santa Clara County cities to identify additional neighborhoods for implementation.</p>
4. Develop waste to energy technology infrastructure at the City's WPCP. (<i>Zero Waste & Waste to Energy</i>)	Collaborate 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>Finalize site feasibility assessment.</p> <p>Complete Environmental Review and permitting process.</p> <p>Conclude lease negotiations.</p> <p>Status: Ongoing.</p>	<p>Begin construction of dry fermentation AD facility at Nine Par.</p> <p>Conduct Feasibility study of gasification pilot unit.</p> <p>Integrate conversion options into new commercial system design.</p>
5. Support our Santa Clara Valley Water District partnership agreement for long-term development of recycled water use.	Assure current and future recycled water customers continue to receive a reliable high quality product through implementation of the	<p>Council and Water Board approval of long-term recycled water agreement framework in Spring 2010.</p> <p>Status: Agreement approved.</p>	Implement agreement with Santa Clara Valley Water District for operation and maintenance of the AWT.

Strategic Focus	Proposed Strategy	2010 Work Plan	2011 Work Plan
Develop local partnerships to support a locally sustainable water supply. <i>(Recycle or Beneficially Reuse Wastewater)</i>	Advanced Water Treatment facility.		
6. Support the State's goals for additional use of recycled water. <i>(Recycle or Beneficially Reuse Wastewater)</i>	Participate in regional and State activities to promote the safe use of recycled water.	Provide support in the development of a State Recycled Water Policy and General Permit for efficient and consistent regulation in support of additional recycled water use. Participate in regional efforts to streamline site supervisor training. Status: In progress.	Continue to support and develop efficient and consistent regulated uses of recycled water in the region and State.
7. Stronger Advocacy; Broaden Partnerships. <i>(Sustainable General Plan)</i>	Increase Role as Advocate in State / Regional planning and grow partnerships with non-profits.	Participated in MTC, ABAG, and BAAQMD regional planning initiatives.	Continue to participate in MTC, ABAG, and BAAQMD regional planning initiatives (e.g., Sustainable Communities Strategy).
8. Expand alternative fuel infrastructure. <i>(100% Public Fleet on Alternative Fuels)</i>	Collaborate with other jurisdictions for regional compatibility.	Collaborate with The ETDC and Gov2Gov in applying a diverse complement of EV vehicles and building a sustainable EV charging infrastructure throughout the City. Status: The City has participated in several regional efforts to standardized EV infrastructure and developed a common regional strategic vision including goals, projections and principles	Collaborate with regional partners in future grant solicitations. Develop a local strategy to deploy a Car-Sharing program in San José that could support the City's fleet needs during the workday and be available for program participants after hours and on weekends.

Strategic Focus	Proposed Strategy	2010 Work Plan	2011 Work Plan
		<p>regarding the deployment of electric vehicle charging infrastructure as well as provide coordination of grant submittals within the regional framework. San José has participated in several regional EV charging grant solicitations which have resulted in grant awards. A summary of those awards is listed above in the Grants Received section.</p>	
<p>9. Expand, maintain, and track new community forest tree plantings through partnerships with residents and community groups. <i>(100,000 Trees & Zero Emission Lights)</i></p>	<p>Develop partnerships with California Climate Action Registry to explore carbon offset program and develop system to comprehensively track net new trees planted.</p>	<p>Continue progress on finishing the complete street tree inventory effort.</p> <p>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.</p> <p>Status: Over 50% of the street tree inventory has been completed. Inventory grants have been submitted to fund the continued street tree inventory. Work is progressing on updating the Street Tree Ordinance of the Municipal Code. Increased efforts with Our City Forest and the CIP database made to track tree plantings.</p>	<p>Continue progress on finishing the complete street tree inventory effort by seeking grant funding and using existing City resources and Our City Forest.</p> <p>Complete and evaluate Year One of the downtown Tree Maintenance Pilot Program, and explore feasibility of in-fill plantings with the Downtown Association as part of the Property-Based Improvement District tree maintenance partnership.</p>

Strategic Focus	Proposed Strategy	2010 Work Plan	2011 Work Plan
10. Leverage partnerships to research heat island effect and determine priority areas to develop the community urban forest tree canopy. <i>(100,000 Trees & Zero Emission Lights)</i>	Partner with LBNL, for data support, planting demonstration projects, and ties to energy efficiency measures.	NA	Scope work plan along with other City staff from OED and ESD on urban vegetation as part of LBNL's Cool Cities pilot. Partner on funding opportunities.
11. 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.	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. Status: Postponed action due to resource limitations.	Develop a strategy to backfill City's streetlight energy requirements with renewable energy.
12. Expand and maintain trail network through partnerships. <i>(100 Miles of Interconnected Trails)</i>	Establish partnerships with non profits and private entities.	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. Status: The Trail Watch program will be an adjunct to existing Adopt-A-Trail program and a list of tasks and duties is being finalized.	Implement Trail Watch program.

Communications and Engagement

Strategic Focus	Proposed Strategy	2010 Work Plan	2011 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>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> <p>Status: Strategic Energy Action Plan adopted by Council in May 2010.</p> <p>Silicon Valley Energy Map launched (Beta version) April 22, 2010. Ongoing development and updating.</p> <p>Identified neighborhood volunteers and “energy ambassadors” in the first target neighborhood for the Energy Watch’s moderate income residential program.</p>	<p>Status report to Council on implementation of Strategic Action Plan in March 2011.</p> <p>Implementation of Better Building Program and Innovation Pilot program.</p> <p>Continue quarterly updates and ongoing enhancements of Silicon Valley Energy Map.</p> <p>Develop Energy Efficiency Exhibit as part of San José Green Vision Clean Energy Showcase.</p> <p>Implement community Energy and Environment fairs in at least 4 Santa Clara County low/moderate income neighborhoods as part of the moderate income residential program. Work with City Council Districts to ensure energy presence at district community events.</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>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> <p>Status: Numerous workshops and</p>	<p>Establish an integrated Green Vision educational outreach program that incorporates many Green Vision goals.</p> <p>Establish a series of educational outreach activities for summer of 2011 focused on energy efficiency and renewables.</p> <p>Working with other green tech workforce development and training programs, provide integrated and collaborative educational activities as determined through a gaps analysis that will identify the priority actions for the City.</p>

Strategic Focus	Proposed Strategy	2010 Work Plan	2011 Work Plan
		community presentations have been held in 2010 related to renewable energy. In addition, teacher training and “train the trainer” workshops have been held to provide solar curriculum and classroom materials.	
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.	Conduct additional research and outreach in Spring 2010. Develop policy for Council approval Fall 2010. Status: Delayed pending implementation of CALGreen Code.	Engage stakeholders on implementation of Green Building Policy for new construction and CALGreen to inform policy on renovations and retrofits.
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.	Test materials through counter staff activity. Finalize outreach materials after receiving feedback from counter staff testing. Status: Complete.	Update Outreach Material to reflect CALGreen requirements.
5. Create public and private partnerships to enhance City’s ability to market recycling water to local industry. <i>(Recycle or Beneficially Reuse Wastewater)</i>	Partner with Sustainable Silicon Valley to launch the EcoCloud™, a virtual industrial ecosystem where industry, government and educational institutions can work together to become more sustainable.	Pursue Cooling Tower Initiative and local community and regional partnership to support the development of recycled water use. Status: In progress.	Assist with EcoCloud™ website development and success, workshops and other project to facilitate customer connection.

Strategic Focus	Proposed Strategy	2010 Work Plan	2011 Work Plan
<p>6. Outreach to business, industry associations, and environmental advocates. <i>(Recycle or Beneficially Reuse Wastewater)</i></p>	<p>Solicit feedback on various ordinances related to recycled water.</p>	<p>Focus on businesses within proximity of the SBWR pipeline to support our region’s development of a more sustainable water supply.</p>	<p>Collaborate with non-profit, academic and private sector partners to facilitate the use of recycled water for cooling towers. Implement web-based social networking tools to enhance marketing by creating a community of industrial customers.</p>
<p>7. Publicize Draft Plan policies. <i>(Sustainable General Plan)</i></p>	<p>Focused civic engagement with Task Force, identified stakeholders and community organizations.</p>	<p>Completed Phase II Outreach activities (Cal APA and NCAPA awards), engaging approximately 5,000 community members.</p>	<p>Citywide residential mailer; Neighborhood Group Presentations; Task Force Meetings; Public Hearings.</p>