



CITY OF SAN JOSE

# Green Vision 2011 Annual Report

Including Tips For  
A Greener Community



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## **Executive Summary**

Although the overall financial outlook for the City and State continues to be challenging, the San José's Green Vision strategy helps position San José 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. To date, San José has received over \$85 million in grant funding related to Green Vision projects. Although, as Federal and State grant money, including federal stimulus dollars and tax credit allocations targeted at fostering and building the green economy are being expended, staff are evaluating strategies and work plans in order to advance the Green Vision initiatives with limited resources.

## **2011 Key Achievements**

The Green Vision Annual 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:

- **155** new Clean Tech jobs in 2011, **7,000** total clean tech jobs; over **\$7 billion** in total **venture capital invested** in Clean Tech companies in Silicon Valley, with **\$1.7 billion** invested in 2011 alone
- Energy efficiency measures implemented at City facilities have saved **\$170,000** in cost savings and **\$25,000** in rebates/incentives
- To date, **3,274 solar photovoltaic (PV)** systems with a total capacity of over **44 MW** have been installed in San José which is equivalent to **11,099 4 kW** residential systems
- Council approved agreement with SolarCity to install **solar at 28 City facilities** with total production potential of **4 MW**
- Over **5.4 million** square feet of certified green buildings completed to date, including **17 municipal** buildings totaling to **1.4 million** square feet
- Continuing to have the highest diversion rates in the nation including a **71%** overall diversion rate, **77%** multi-family, **84%** City facilities
- Over **10 miles** of new recycled water pipes have been installed and various facility improvements are underway including construction of the **Advanced Water Treatment Facility**
- **General Plan Update** was adopted by the San José City Council on **November 1, 2011**
- **40%** of City fleet on alternative fuel; fleet **GHG emissions** reduced by **32%** compared to 2003 baseline
- With the leadership of Our City Forest, planted **2,148 new trees**, opened a **community tree nursery**, and completed **over 60%** of the **street tree inventory** with the help of grants and AmeriCorps volunteers

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- With San José as a key advocate, the California Public Utility Commission (CPUC) approved a Pacific Gas & Electric (PG&E) tariff pilot for network controlled energy efficient Light Emitting Diode (LED), **dimnable streetlights**; awarded contract for **2,100** smart LED streetlights
- Over **\$5.4 million** in grant funding for **trails** and on street **bike** and pedestrian improvements
- **Trail Count** survey indicated a **5.7% increase** in usage along downtown's Guadalupe River Trail and San José continues to be **20% above** the national average in terms of commuting by bike

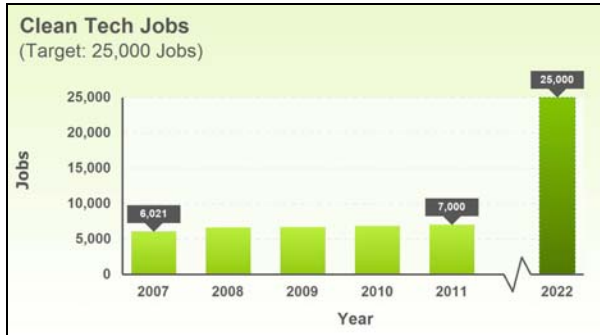
## **Awards & Accolades**

In 2011, the City's Green Vision garnered numerous awards and accolades including:

- San José became the first U.S. city to earn **E-Stewards Enterprise** designation, which recognizes companies, institutions, and governmental bodies that commit to making best efforts to uphold the highest standards for the responsible management of electronic waste.
- **CNN Money** recognized the Environmental Business Cluster as one of seven hot startup incubators in the nation.
- **Storm Water Solutions** (SWS) selected the San José Environmental Innovation Center (EIC) - Phase I project as a 2011 SWS Top Projects winner. The EIC project was recognized in the December 2011 issue of SWS.
- **Happy Hollow Park & Zoo**, a certified green building was selected as an **American Public Works Association** - Silicon Valley Chapter Project of the Year (2011).
- In recognition of the San José SunShares program, in conjunction with the City's overall Green Vision, the **Silicon Valley/San José Business Journal 2011 Energy Award** has named **San José the Best Conservation Leader - Public Sector**.
- In the category of large community, San José won the **U.S. Chamber's Business Civic Leadership Center** (BCLC) 2011 **Siemens Sustainable Community Award** for its Green Vision.
- The City of San José received an **Award of Merit** at the 2011 Trails and Greenways Conference recognizing the City's structured approach to biennially inspecting the 51 pedestrian bridges found along city trails.

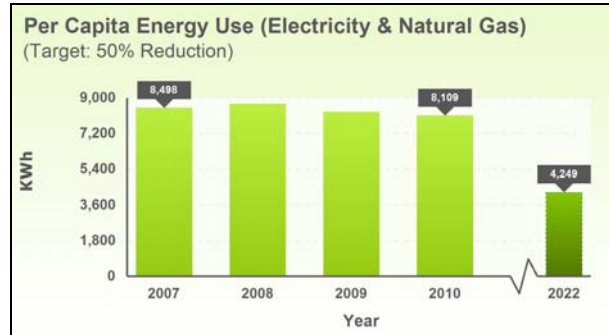
Please see the Green Vision website Awards and Accolades page for a comprehensive list:  
<http://greenvision.sanjoseca.gov/AwardsandAccolades.aspx>

## 2011 Key Performance Metrics



**2011: 7,000 jobs**  
**2010: 6,845**

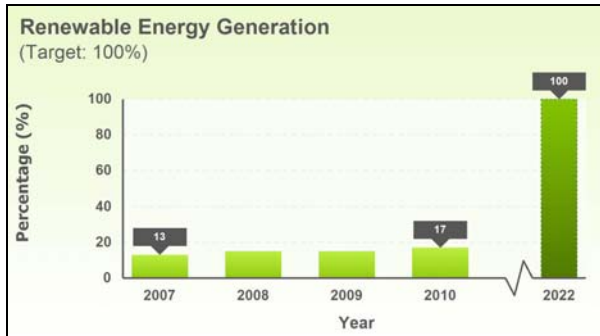
Previous figures were updated to reflect more accurate job calculations.



**2010: 8,109 kWh**

**2009: 8,295 kWh**

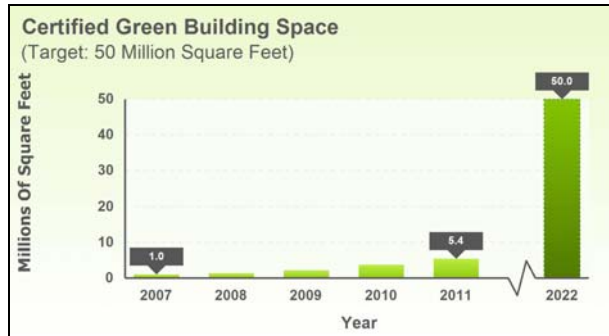
2011 electricity usage data is not available from PG&E until July 2012 and will be updated as those figures are available.



**2010: 17%**

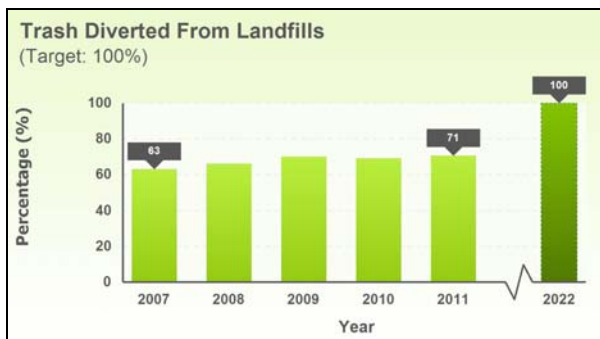
**2009: 15%**

2011 electricity usage data is not available from PG&E until July 2012 and will be updated as those figures are available.



**2011: 5.4 million square feet**

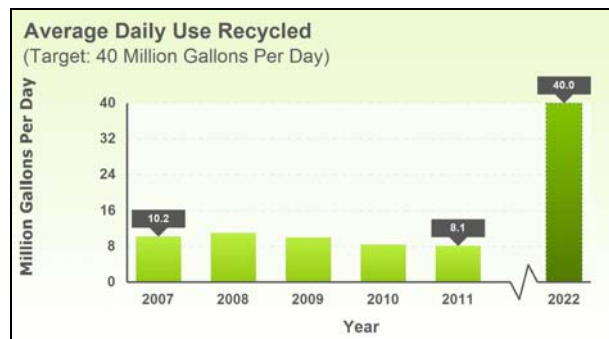
**2010: 3.7 million square feet**



**2011: 71%**

**2010: 69%**

The original diversion rate of 63% shown for 2007 was the most recent (2004) diversion rate approved by CalRecycle. The 2010 diversion rate has been updated to reflect data more recently provided by CalRecycle. 2011 data is still pending approval.

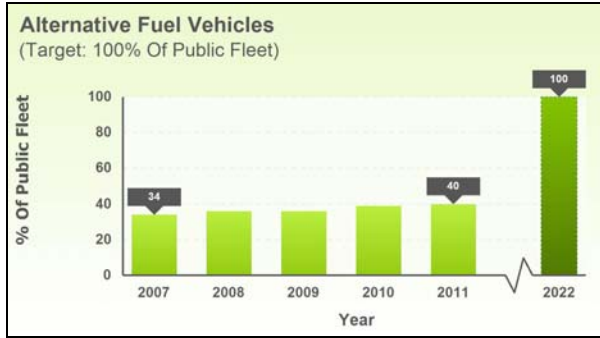


**2011: 8.1 million gallons per day**

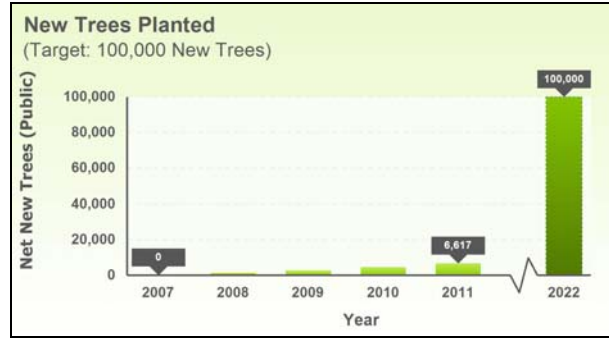
**2010: 8.4 million gallons per day**

The 2011's reduction in recycled water use is attributed to cooler temperatures and average rainfall, the current economic downturn, and subsequent reductions in energy use.

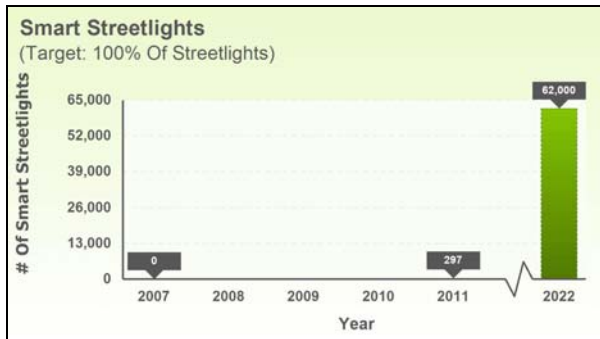
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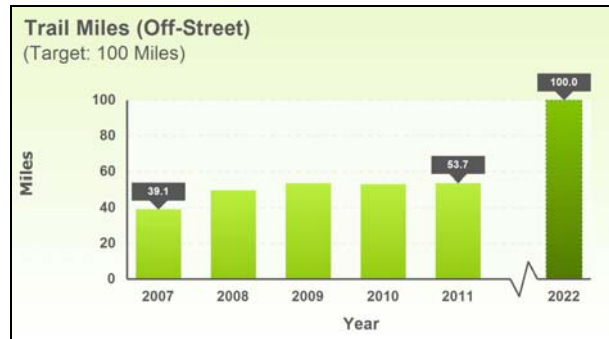
**2011: 40%**  
 2010: 39% of the fleet ran on alternative fuels  
 Previous figures were updated to reflect more accurate fuel and fleet calculations.



**2011: 6,617 trees**  
 2010: 4,469 trees



**2011: 297 smart streetlights**  
 2010: 297 smart streetlights  
 In 2011, staff focused on procurement of 2,100 lights.



**2011: 53.7 miles**  
 2010: 53.2 miles  
 Data points were adjusted to reflect updated trail inventory with a more precise measurement of Coyote Creek Trail system.

## 2012 Work Plan and Priorities

This report outlines a detailed 2012 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?

A comprehensive work plan summary is included at the end of this report. Key work plan priorities are highlighted below:

### Leading by Example

In 2012, staff will continue to focus on projects and programs that will help advance the Green Vision priorities, while reducing City operating costs and demonstrate San José's leadership by example in sustainable practices.



**2012 Work Plan Highlights:**

- Identify resources to support demonstration displays, workforce development training, and educational programming at the San José Environmental Innovation Center.
- Reduce municipal energy use by an additional 5%, use Federal, State and PG&E funding to expand energy efficiency education, audits and improvements in the community
- Install solar at a minimum of 4 City facilities
- Increase waste diversion from businesses and residents through the following programs: the new commercial system, the RecyclePlus recycling rewards pilot, Green Events Certification, and Go Green Schools Program
- Implement a Strategic Planning process to develop a shared vision amongst SBWR partners and guide the future of the program
- Develop a Council Implementation Policy for the Greenhouse Gas Reduction Strategy; prepare Urban Village Plans and revise the Zoning Ordinance to facilitate sustainable urban development in identified focused Growth Areas
- Install 52 electric vehicle charging stations primarily downtown and in City-owned garages
- Install 2,100 LED streetlights with smart adaptive lighting controls; launch first year of PG&E dimmable streetlight tariff pilot
- Start pavement of Lower Guadalupe River Trail and Highway 237 Bikeway Trail; expand on-street 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.

**2012 Work Plan Highlights:**

- Partner with industry leaders and regional advocacy groups on Clean Tech Legislative Agenda
- Continue to track related Federal and State legislation

**Financing Mechanisms**

As American Recovery and Reinvestment Act grants near completion, staff continues to explore alternate financing mechanisms such as Power Purchase Agreements for solar, State incentives and rebates, and leveraging matching funds through regional grant applications to advance the Green Vision. In 2011, grant applications totaling over \$40 million were submitted, over \$14 million in grants were attained, and nearly \$5 million in applications are pending. For grant applications to truly be a high priority, planning for adequate staffing resources and local funding matches will be essential.

A key challenge related to financing strategies is the ability to retain cost savings from energy efficiency projects to reinvest in future projects. Approximately \$170,000 in cost savings transfers and \$25,000 in rebates/incentives were deposited into the Energy Fund for use in fiscal year 2011-12 on energy efficiency projects and to fund the Energy Officer position. However, cost savings of approximately \$100,000 were redirected from the City Energy Fund to the City's General Fund in FY 2011-2012 Budget, resulting in a reduced ability to lower the City's energy

consumption and provide ongoing savings to the General Fund. Staff's ability to continue to implement future energy improvement projects will thus be further impacted if there are additional reductions to the City Energy Fund and completion of the Energy Efficiency and Conservation Block Grant (EECBG).

**2012 Work Plan Highlights:**

- Use Federal, State and PG&E funding to expand energy efficiency education, audits and improvements in the community
- Finance solar installations on City facilities using Power Purchase Agreements
- Continue to seek financing and grant opportunities to fund streetlight conversions

**Strategic Partnerships**

Partnerships will continue to be a strong focus of the Green Vision in 2012. Through the Demonstration Partnership Policy and programs and key initiatives under the Green Vision, San José is continuing to support entrepreneurs to develop emerging technologies that become the driving industries of the future. Our partnerships with other entities such as schools, universities, non-profits, private companies, and regional agencies will help us reach our common goals in the community as well as our Green Vision goals.

**2012 Work Plan Highlights:**

- Partner with National Labs on clean tech demonstration and deployment strategies at the Environmental Innovation Center
- Partner with Zero Waste Energy Development to begin construction of anaerobic digestion facility at 9 Par; partner with Harvest Power to conduct feasibility study of gasification pilot
- Partner with the Santa Clara Valley Water District to attain approval of regulatory permits and an Operations and Maintenance agreement for the Advanced Water Treatment Facility
- Collaborate with San José State University to launch Car Share program
- Continue to work with Our City Forest to partner on opportunities and leverage resources, including assisting with the relocation of OCF offices

**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. Examples of engagement initiatives that will continue into 2012 include:

- *The San José Green Vision Resource Team* – joint collaboration with the Bay Area Air Quality Management District to promote the Green Vision
- *City Green Team* – to raise awareness of the Green Vision throughout the organization and targets behavior change that will help save energy and water and reduce waste while reducing City operating costs



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- *Earth Day* – collaborate with local organizations including nonprofits, schools, and downtown businesses to organize an Earth Day event that will showcase the Green Vision goals and programs
- *Green Vision Website* – continue to develop and improve online tools integrated into the Green Vision website to increase community engagement and interest. To learn more, please visit: <http://greenvision.sanjoseca.gov/>.

**2012 Work Plan Highlights:**

- Conduct additional outreach and education for staff and development community related to Green Buildings
- Continue to update Green Vision website and increase awareness of the Green Vision strategy

## **Conclusion**

The recent recession and several consecutive years of budget deficits have taken a heavy toll on the City’s fiscal situation and there is very limited funding available for Green Vision implementation. 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. Even with extremely limited funding staff has been able to make significant progress on the Green Vision through grants and partnerships and will continue to focus on ways to leverage non-City resources.

## 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 charting goals to foster clean tech jobs, energy use reduction, renewable energy, green building, waste reduction, water reuse, sustainable development, clean fleet, trees, zero emission streetlights and interconnected trails.



San José City Hall

### 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

Achieving the ten Green Vision goals will require capitalizing on the innovation of Silicon Valley and fostering the development of emerging markets to develop the technologies necessary to address the challenges within the ten Green Vision goals. Through the Demonstration Partnership Policy, the City and their partners are committed to supporting entrepreneurs to develop emerging technologies that become the driving industries of the future. To learn more please visit: [greenvision.sanjoseca.gov/GetInvolved.aspx](http://greenvision.sanjoseca.gov/GetInvolved.aspx)

This report provides information on key 2011 Green Vision accomplishments along with the diverse challenges and strategic direction needed for realizing the long-term vision. The report also includes a proposed 2012 Work Plan.

## Strategic Framework

The 2012 Comprehensive Work Plan 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?

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.



Seven Trees Community Center  
Green Art

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 levels** – 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 <http://greenvision.sanjoseca.gov/> which provides updates and highlight key strategic opportunities and challenges.

## Climate Change and Greenhouse Gas Emissions



### Greenhouse Gas Reduction Strategy

The City of San José has adopted a Greenhouse Gas Reduction Strategy (GHGRS, or Strategy) in conjunction with the recently adopted the *Envision San José 2040 General Plan Update* consistent with the implementation requirements of Assembly Bill 32 (AB32) – the Global Warming Solutions Act of 2006. AB32 requires the State of California as a whole to reduce greenhouse gas (GHG) emissions to 1990 levels by the year 2020. The Strategy was adopted by the City Council as an appendix to the Envision Plan on November 1, 2011. The purposes of the GHGRS are to:

1. Capture and consolidate GHG reduction efforts already underway by the City of San José
2. Distill policy direction on GHG reduction from the Envision San José 2040 General Plan Update
3. Quantify GHG reductions that should result from land use changes incorporated in the Envision General Plan Land Use diagram
4. Create a framework for the ongoing monitoring and revision of this GHG Reduction Strategy
5. Achieve General Plan-level environmental clearance for future development activities (through the year 2020) occurring within the City of San José.

This GHGRS was prepared in accordance with the Bay Area Air Quality Management District (BAAQMD) California Environmental Quality Act (CEQA) Guidelines, and in conformance with CEQA Guidelines Section 15183.5, which specifically addresses GHG Reduction Plans.

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; and providing access to safe, pedestrian friendly sidewalks, trails and bike paths, as well as mass transit. GHG emissions are measured by other Green Vision goals and are not duplicated here.

## **Greenhouse Gas Reporting**

The annual reporting of the Green Vision and the every-four-years Major Review of the Envision General Plan are the basis of the GHG monitoring and reporting program. The City is committed to reporting on the Envision Plan's progress, modifying the Plan to improve the outcomes consistent with the overarching goals of the Plan and contribute toward the reduction target for 2035. The Green Vision Annual Reports summarize the City's intended approach. The Green Vision Annual Report provides a detailed snapshot of yearly activities to meet the City's Green Vision Goals. The annual reporting will be extended to express Green Vision activities in terms of the amount of Carbon Dioxide (CO<sub>2</sub>) emissions reduced or avoided.

The General Plan Major Reviews will update the City's GHG inventory and provide an opportunity for input from members of the General Plan Task Force and other stakeholders to re-focus the Strategy, and to improve its efficacy and consistency with the San José General Plan and California goals. The Major Reviews will also be the time increment during which citywide emissions measurement will occur. Given the difficulty in direct measurement of GHG emissions, this every four year assessment will likely be based on a combination of modeled traffic patterns and real world data.

Additionally, mandatory and voluntary measures to reduce GHG emissions may be added to the Strategy as a part of the Major Review process in order to meet the Strategy's GHG reduction targets.



## 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.*



*Wireless Pneumatic Thermostat.  
Photo courtesy of Cypress Envirosystems.*

### 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:** Two years ago, San José struggled through the depths of a recession with high unemployment and home prices falling. As 2011 came to a close there was renewed optimism that San José is on the path to recovery. Office rents are up, vacancy rates are down as companies are securing and renewing leases. Strong job growth was on the incline with over 25,000 jobs added, and unemployment rates dipped below 9%. Global attention to climate change and a range of clean energy policies and platforms continue to fuel business development despite reduced federal stimulus through the Department of Energy. There are strong indicators of growth in the Silicon Valley region which is home to the most mature solar cluster in North America and increasing activity on the energy efficiency front – with notable activity in the Light Emitting Diode (LED) sector which is seeing investment, new technologies, and company formation.

As the definition of clean tech jobs is being refined, methodologies to track the growth in the core green economy are also evolving. As of 2011, there are nearly 7,000 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. There was a 2% increase in total employment and a 9% decrease of total establishments – likely indicators of consolidation and maturing start-ups beginning to hire. These figures are continuously and dynamically updated based on the known-universe of establishments and exclude university employment, contract manufacturers (that assemble products and have substantial presence in San José), and companies that have sub-



segments focused on the green economy<sup>1</sup>. The figures are therefore conservative, yet still represent a State-wide hot-spot for clean tech.

**Finance:** 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 \$1.7 billion in 2011 and totaled over \$7 billion for the last five years – far outpacing other regions in the world. San José based companies like Stion, a manufacturer of Copper Indium Gallium Selenide (CIGS) based thin-film modules, raised \$130 million in private equity—the largest photovoltaic funding round of 2011. San José companies are actively engaged with the Angel and VC networks to secure financing, with the award-winning Environmental Business Cluster and other accelerators and business plan competitions routinely convening investors to facilitate interaction between emerging green companies and potential financiers.

Grants remain an important source to support companies seeking new technology innovations, as well as “market accelerator” partners working to encourage demand and ensure consistency among standards and permitting practices to support deployment at scale. Small Business Innovation Research (SBIR) and Small Business Technology Transfer grants into Silicon Valley outpaced all other regions in the United States with over 250 grant awards nearing a total of \$100 million. 2011 also saw San José company SVTC, located in a 88,000 square foot facility in Edenvale, receive a \$25 million grant under the Department of Energy (DOE) Photovoltaic Manufacturing Initiative. This grant was made to support the first manufacturing development facility (MDF) in the United States to reduce the costs and development time for the photovoltaic (PV) solar industry. The MDF will focus on the commercialization of silicon PV manufacturing processes to enable start-ups and other solar innovators to accelerate development and reduce time-to-market. The goal of this initiative is to reduce the cost, time, and risk associated with the commercialization of PV solutions. Additionally, San José based industry consortium effort Solar Tech was awarded a \$2.5 million dollar Department of Energy Sunshot grant to develop a platform for model codes, standards, rules and procedures to enable reduced deployment times and costs for solar installations nationwide.



The **Solar Tech** industry consortium, of which the City of San José is a founding member, continues to bring together industry and the public sector, to drive growth of the solar energy sector. In 2011, Solar Tech launched the Solar Energy Estimate (SEE) Report as an open web service at [SolarHub.com](http://SolarHub.com). The goal is to reduce consumer confusion by offering a service similar to the Federal government’s new-car Miles Per Gallon (MPG) rating system. The one page SEE report uses standardized calculations combined with the installer’s site-specific equipment design variables and local solar installation data to provide the annual estimated energy production for the solar system. This standardized estimate allows consumers to compare multiple solar PV designs for a specific location. To learn more, please visit: <http://www.solartech.org/>

<sup>1</sup> The data is drawn from National Establishments Time Series (NETS) database based on Dun & Bradstreet business unit data, and New Energy Finance and the Cleantech GroupTM, LLC for purposes of identification and classification of green businesses. The approach provides the best indicator of the emerging clean tech sector – and provides an accepted methodology for measuring growth in this dynamic sector.

**Clean Tech Companies:** San José's list of Clean Tech companies at all stages of maturity continues to grow as Phillips Lumileds, Sunpower, Cypress EnviroSystems, BioFuelBox, Borgata, Echelon, Solexant, SolarJunction, SoloPower, Stion, SunWize, Wrightspeed, Chromasun, Switch, Xicato are joined by household names like Cisco and IBM and Fairchild Semiconductor who are also 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. Among the new names to join the clean tech economy in San José are:

- Alterlume set up headquarters in South San José and recently hired 15 employees
- Auxin Solar set up headquarters in South San José and is currently hiring approximately 45 employees
- Enki Technology Inc. set up headquarters in North San José and recently hired 10 employees
- Lumniversal set up headquarters in downtown San José and recently hired nearly 50 employees
- OptoElectronix set up headquarters in downtown San José and recently hired 25 new employees
- Reel Solar set up headquarters in North San José
- Topanga Technologies set up headquarters in North San José and recently hired 10 new employees

**Clean Tech Open:** The Cleantech Open (CTO) has established itself as a leader in developing clean technology startup entrepreneurs. Since its inception in 2006, hundreds of teams have availed themselves of the CTO'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 hosting the CTO Boot Camp and CTO Global Forum which attracted over 1,000 people to downtown San José for signature events drawing people from around the globe. In 2011, San José hosted the CTO National Investor Conference in downtown San José (900 attendees), the National Academy, a 3-day program (400 attendees from 25 states), and the Global Forum at a 2-day event (1,000 attendees, including entrepreneurs from 25 countries). 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.

**Foreign Investment:** City staff routinely hosts clean tech companies and delegations from around the world, including global forum winners of the CTO. Notable efforts to connect San José's efforts with international companies as well as support Silicon Valley companies' interest to access new markets include:

- **Innovative Sweden, Stanford University and Access San José** – City staff presented the San José Economic Development and Clean Tech Strategy to over 25 Swedish clean tech companies seeking a presence in Silicon Valley.
- **Opportunities for California Green Companies in Brazil** – City staff hosted the U.S. Department of Commerce, the San José Silicon Valley Chamber of Commerce, and the US-Brazil Business Council in Washington, D.C. half-day business seminar on February 13, 2012.

## San José Environmental Innovation

**Center:** The San José Environmental Innovation Center will house the 1) Clean Tech Demonstration Center which will provide space to design, develop, commercialize and manufacture prototypes of advanced clean and renewable energy transportation technologies for green fleet vehicles; 2) training, conference, and office space for clean tech companies and environmental nonprofits; and, 3) a Habitat for Humanity ReStore, which will sell used construction



*San José Environmental Innovation Center*

materials to contractors and the general public and 4) a Household Hazardous Waste facility. In addition to accepting a grant award from the Department of Commerce, Economic Development Administration in the amount of \$2.35 million, City staff closed the first ever municipal-led New Market Tax Credit (NMTC) transaction for \$4.5 million. Both efforts brought non-local resources to this Project at a time of resource constraints. Slated to open in Spring 2013, the Center will link to existing and new clean tech commercialization partners to drive investment and programming at the Center including: the technology community, Department of Energy, Lawrence Berkeley National Labs (LBNL) Energy and Environment Technology Division, and California Energy Commission funded grant programs, utilities, and financiers. More details about the EIC are described in the Goal 3 and 5 chapters.

**Commercialization Partnerships:** Demonstration of emerging technologies is critical to proving concept, attracting capital and scaling quickly and San José is committed to using its lands, buildings, and processes as a test-bed to support these commercialization efforts. In 2011, San José formalized partnership efforts with LBNL – Energy Efficiency Technology Division to develop a research and demonstration pilot at the EIC. A Memorandum of Understanding (MOU) is being drafted and is expected to be finalized and approved in 2012.



*Lawrence Berkeley National Laboratory*

**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 American Recovery and Reinvestment Act (ARRA) 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 four grant agreements totaling \$1.09 million with the following companies: Intermolecular, SoloPower, Brocade Communication, 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 to 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 benefit to the company. Of the combined 37 jobs anticipated to be created through this program, 16 positions have been filled by low-to-moderate income San José residents.

**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 ARRA funds, work2future was able to serve youth by providing them with work experience programs that included linkages with green employers and also a variety of environmental related efforts within the Green Cadre program. The work2future Green Cadre Program provides young adult leaders with the opportunities for success through technical skill training, job readiness, and work experience thru internships with an emphasis on conservation and civic service benefiting their communities. The Green Cadre internship sites and civic engagement opportunities are collaborative efforts with green industry, non-profits and conservation groups. Work2future will continue to develop this program with future Cohorts of participants starting in 2012. Additionally, local workforce investment boards and City staff partnered on the development of the *Silicon Valley Emerging Green Study* to understand green employment trends and assess and forecast opportunities associated with the green economy. The report was circulated in early 2011 to partners around the valley and offers recommendations to support the emerging green economy moving forward. To learn more, please visit: <http://www.work2future.biz/>.



*Green Cadre members present their solar and energy efficiency concept models at City Hall.*

**Leadership/Communication Strategy:** Sharing our approach, 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. In 2011, staff presented on San José's efforts in a range of forums and audiences, including but not limited to: West Coast Green, Connectivity Week, and CleanStart.

## **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. 2011 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, and urging support and expedited review for a range of Federal and State applications for clean tech funding. In 2012, staff will be following additional bills that are being introduced in the State legislature, related to manufacturing support for clean technologies.

## **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 2012 will include: implementation of *Clean Tech Legislative Agenda*, development of demonstration partnership projects at the EIC, and working with regional consortiums to create and support regional

deployment models. Staff will also be providing 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

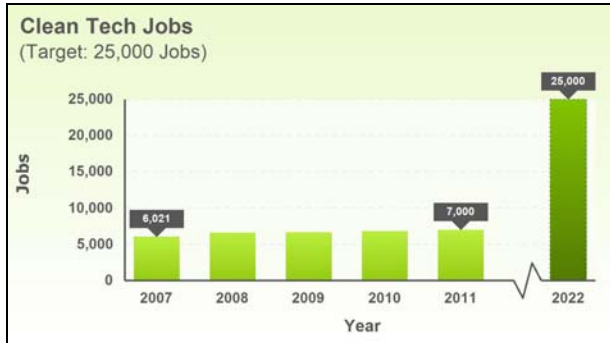
Strategic Focus	Proposed Strategy	2011 Work Plan	2012 Work Plan
<b>Lead by Example</b>			
Identify space for local clean tech companies to manufacture in San José.	Work with key property owners and evaluate use of public lands for industrial development.	Develop and use data and analysis to identify industry clusters, target policy, and track performance.  <b>Status:</b> OED staff has completed eight manufacturing assessments as potential manufacturing sites.	Continue to develop and use data and analysis to identify industry clusters, target policy, and track performance.
Demonstrate clean transportation, renewable energy, smart grid and energy efficiency.	Pursue increased flexibility in implementing demonstration policy to allow for more clean technologies deployed in San José facilities.	Deploy demonstration projects on City owned buildings and land, and community-wide to support commercialization of clean technologies.  <b>Status:</b> Partnered with Armageddon Energy to install Solar Clovers on City Hall Wing.	Attract resources to support demonstration projects at the San José Environmental Innovation Center.
Greening of small businesses through BusinessOwners Space.com.	Launch resources to support greening of small businesses.	Develop an outreach strategy within the BusinessOwnerSpace partner network to implement Green Resource tool.  <b>Status:</b> Launched new Green Resource pages on BusinessOwnerSpace.com and a new Green Assessment Tool.	Complete BusinessOwnerSpace.com enhancements and implement outreach strategy.
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.  <b>Status:</b> Study Completed.	<i>Not applicable.</i>



Strategic Focus	Proposed Strategy	2011 Work Plan	2012 Work Plan
<b>Advocating Policies</b>			
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.	Partner with clean tech industry, and regional advocacy groups to develop Clean Tech Legislative Agenda for Silicon Valley.  <b>Status:</b> 2011-2012 Clean Tech Legislative Agenda Adopted May 2011.	Partner with clean tech industry, and regional advocacy groups to develop 2012-2013 Clean Tech Legislative Agenda for Silicon Valley.
<b>Financing Mechanisms</b>			
Support for incubators and commercialization of clean tech products, and innovation clusters.	Compete for federal and state funding opportunities to support clean tech sector.	Continued efforts to access resources to support clean tech industry.  <b>Status:</b> EDA Application approved for \$2.35 million for the EIC.	Continued efforts to access resources to support clean tech industry.
<b>Strategic Partnerships</b>			
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.	Continue to partner with workforce training providers to develop clean tech training opportunities.  <b>Status:</b> In 2011, 73 participants completed a workforce training program related to clean tech jobs.	Continue to partner with workforce training providers to develop clean tech training opportunities.
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.  <b>Status:</b> MOU drafted and approved. Currently, soliciting feedback and information from potential private sector industry partners.	Advance partnership efforts with LBNL, academic institutions, manufacturers and incubators, accelerators and business plan competitions.

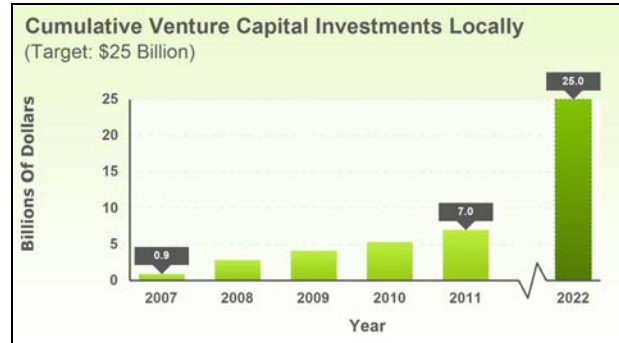


## Performance Metrics



**2010: 6,845**

Previous figures were updated to reflect more accurate job calculations.



**2010: \$5.3 Billion**

2011 figure is only through November 2011



**2010: 598 participants**



**2010: 74 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.*



*Solar & Energy Efficiency Fair April 30, 2011*

### Achievements & Successes

In 2010, Council adopted the Strategic Energy Action Plan, which focuses on achieving the Green Vision energy goals – 50% per capita reduction in energy use and receiving 100% of the City’s electricity needs from renewable resources. To achieve the Green Vision goals, energy use will need to be reduced by at least five percent per year until 2022. A detailed update on the Strategic Energy Plan is currently provided on a quarterly basis at the City Council’s Transportation & Energy Committee meetings. Some associated achievements are highlighted below.

**Municipal Energy Efficiency:** There are currently two primary sources of funding for energy efficiency projects at City facilities: the City of San José Energy Fund and American Recovery and Reinvestment Act (ARRA) funds via the City’s Energy Efficiency and the Conservation Block Grant (EECBG) from the Department of Energy (DOE).

*Energy Fund* – The City Energy Fund receives monies from the first and second year savings, along with any associated rebates, from completed energy efficiency projects, thus leveraging the savings by reinvesting them to additional energy projects and support. Approximately \$78,000 in first year project cost savings and \$92,000 in second year savings, as well as \$25,000 in rebates/incentives were deposited into the Energy Fund for use in fiscal year (FY) 2011-12 on energy efficiency projects.

*EECBG* – The EECBG provided the City with \$8.8 million in funds. Staff continues to implement the following program activities under the EECBG program:

- \$4.5 million for City facility energy efficiency projects – 49 audits for EECBG projects have been completed to date. Of the 71 projects identified for EECBG funding, 26 were completed by the end of 2011. An implementation plan for the remaining projects (audits and installations) is being coordinated with the Public Works Department for completion during FY 2011-12 and a portion of FY 2012-13.
- \$2.3 million for the development of solar projects on City facilities – City Council adopted a

#### **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](http://www.pge.com/rebates).
5. Caulk around windows, doors, and plugs.
6. Make sure that your home or business is fully insulated.

resolution approving a form Power Purchase Agreement (PPA) and authorizing the City Manager or designee to execute PPAs and all related documents with SolarCity Corporation by June 13, 2013. More details are described in the Goal 3 chapter.

- \$2 million for Light Emitting Diode (LED) streetlights – 2,100 LED lights with smart controls will be installed in 2012. More details are described in the Goal 9 chapter.

**Community Energy Efficiency:** In 2011, San José continued to focus on regional coordination in achieving energy reductions at the community level including ongoing collaboration with Santa Clara County in their role as County administrator for the new statewide Energy Upgrade California (EUC) program and the following contract funding and grants to implement the following community energy efficiency programs:

*Silicon Valley Energy Watch* – As staff leads the 2010-2012 Silicon Valley Energy Watch program (Energy Watch) for Santa Clara County, funding for local energy efficiency programs remains vulnerable to proposed State legislation (see Legislation section: Assembly Bill (AB) 723 (Bradford) Public Goods Charge for Energy Efficiency). The Energy Watch program continues to provide the following educational resources, including the Silicon Valley Energy Map and the Kill A Watt™ EZ energy meters, to residents throughout Santa Clara County.

*Community Energy Champions Grants* – On April 29, 2011, the City and Pacific Gas and Electric (PG&E), through the Energy Watch program, awarded \$335,000 in grants, ranging from \$10,000 - \$35,000, to 18 recipients from non-profit organizations and local municipalities. The grant money will fund education and outreach programs designed to increase energy efficiency awareness and promote lasting behavior change within targeted communities. Grant recipients included:

- Acterra
- Alviso Neighborhood Group
- Asian American Center of Santa Clara County
- Boys & Girls Club of Silicon Valley
- Catholic Charities of Santa Clara County
- Center for Training and Careers
- City of Cupertino (GreenBiz Cupertino)
- City of Cupertino (Growing Greener Blocks)
- San José Community Media Access Corporation (CreaTV)
- De Anza Community College
- Enlighten Culture and Education Foundation
- Green Energy Agents
- Midpeninsula Community Media Center
- Rebuilding Together Silicon Valley
- Sacred Heart Community Service
- San José State University Research Foundation
- SJB Child Development Center
- ZERO1: The Art & Technology Network



*Lighting retrofit underway at the Central Service Yard, which includes the installation of CFLs at San José Fire Museum housed onsite, will result in an estimated \$40,000 in annual electricity cost savings and a \$30,000 rebate to the City*



*Mayor Reed and Councilmember Liccardo present Community Energy Champion Grant winners at San José's Bright Green Day - April 29, 2011*

*Better Buildings Program* – The San José Better Buildings Program is a two-year DOE grant funded pilot program that aims to increase comfort, health, and home safety via energy efficiency in the Hillview-TOCKNA (Tully, Ocala, Capitol, King) communities in Districts 5 and 8. It is the only program of its kind in the state of California to focus specifically on low income communities. On May 14, 2011, the program launched with more than 125 residents at the Boys & Girls Club in City Council District 8. The launch was followed up with an extensive outreach program, which coordinated multiple agencies to provide a wide-range of energy upgrades. By the end of 2011, over 160 homes in the targeted communities had received an array of energy efficiency measures. The program runs through September 2012.

**“Green Collar” Job Training Fair in East San José** - On September 27, 2011, the Better Buildings Program, with support from the Strong Neighborhood Initiative, held a workforce training event at the Boys and Girls Club, Smythe Clubhouse in District 8. Local trade schools and adult education providers gave presentations on their “green collar” job training programs. Sixty-one people attended the early morning event that was promoted with the slogan “Get the Skills to Pay the Bills.” Green Collar jobs reduce waste and pollution, benefit the environment, and are the fastest growing job arena.

*Municipal Whole House Rehabilitation Pilot* – City of San José’s Housing Rehabilitation Program will enable over 50 homes already receiving “life, health, and safety” services to also receive comprehensive, performance-based energy efficiency retrofits. The Environmental Services Department is working with the Housing Department to 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 the EUC program. This program is anticipated to begin in early 2012.

## Legislation

The City continues to actively monitor and, where appropriate, comment on legislation and regulation related to energy efficiency and renewable energy. January 2011 marked the beginning of the state’s two year legislative process. Staff has reviewed over 2,000 legislative bills of environmental significance and continues to track approximately 40 bills of importance.

**Continuation of the Public Goods Charge Program:** The City’s community energy efficiency program activities are primarily funded through the Public Goods Charge (PGC). PG&E administers the Local Government Partnership Program/Portfolio, and the Energy Watch program (funded since 2004). The California Public Utilities Commission (CPUC), overall administrator/regulator for the PGC funds, is undertaking a possible extension of the current 2010-12 Portfolio for an additional year (bridge year) and developing potential changes to the overall framework of activities that could affect the City’s access to future grants from this program. The City is working with other California cities to ensure that there is greater engagement with local government partners and a continued strong role for local governments in the implementation of community energy efficiency programs.

*AB 723 (Bradford) Public Goods Charge for Energy Efficiency* – The City took a support position on this legislation as the bill would extend the authority to collect PGC until January 1, 2020, which funds statewide energy efficiency programs. The authority to collect the funds for these programs currently ends January 1, 2012. The PGC is currently administered by the



Investor-Owned Utility (PG&E), and has provided the bulk of financial resources for the City's community energy efficiency programs (over \$2.9 million through the Energy Watch Program since 2004). These funds have been used for direct installation of energy efficiency measures for the residential and business sectors, marketing and outreach, and training activities for energy and construction industry professionals as well as resident homeowners. The PGC has also funded energy efficiency audits, upgrades, new technology installations, and rebates for energy efficiency in City facilities (\$1.3 million since 2006). As a PG&E ratepayer, the City contributes to the overall funding through its utility rates, at an estimated total of about \$550,000 per year. These fees are required, with no guarantee that we will receive funding in return. The bill was last amended on June 29, 2011 and will be taken up by the State Senate for further discussion in 2012.

**Federal Legislation:** On July 20, 2011, Representatives Dan Lungren, Nan Hayworth, and Mike Thompson introduced the Property Assessed Clean Energy (PACE) Assessment Protection Act/HR 2599. PACE is a local government initiative that allows property owners to finance energy efficiency and renewable energy projects for their homes and commercial buildings. Interested owners opt-in to receive financing that is paid back with an assessment on their property taxes for up to 20 years. The proposed bill would direct the Federal Housing Finance Agency (FHFA) to issue guidance stating that state and local PACE assessments do not constitute a default on mortgage terms or trigger remedies provided under their uniform security instrument for mortgage loans. The bill would also order FHFA to rescind earlier lender guidance that halted PACE programs in over 30 states. The bipartisan bill was introduced in an effort to restart these state programs and would allow state PACE programs to fund both energy efficiency and distributed (on-site) generation projects at residential and commercial properties. Staff continues to monitor related legislation.



**Project Details:**

- kWh Saved – 17,631.02
- kW Saved – 4.29
- Annual \$ Savings – \$1,220.15
- Cost of Project – \$7,736.54
- Rebate – \$2,292.00
- Contractor/Installer – Lumenature
- Technologies Installed – T8 linear fluorescent lamps, low power electronic ballasts, and compact fluorescent bulbs

**The San José Teachers Association**

knew that the fluorescent lighting in their offices needed to be upgraded. After researching several options, they decided to go with the RightLights Energy Efficient Lighting Program. The program, offered through a partnership between the Silicon Valley Energy Watch and RightLights, provides publicly-funded energy efficiency audits and upgrades, as well as free expert assistance to small to medium sized businesses to help lower energy bills and boost cash flow. The installers were thorough in their work, and new lighting has given their offices a brighter and cleaner look. Between the enhanced energy efficiency – saving them \$1,220.15 annually – and the available rebates, the teachers association will recoup upgrade costs in just a few years. "The RightLights Program was definitely the right decision for our association," says Stephen McMahon, President of the San José Teachers Association.

**Silicon Valley Energy Watch** is a joint program of the City of San José and PG&E, providing energy efficiency education, outreach, retrofit services, and policy coordination to all of Santa Clara County. To learn more, please visit: <http://energy.sanjoseca.gov/energy-efficiency/>.

## Strategic Direction

More than 80% of the City’s overall energy program activities are funded by federal and utility grants and agreements. First and second year savings achieved as a result of the municipal retrofit projects are put in the City’s Energy Fund and used to support the City’s Energy Officer position and for reinvestment in additional energy improvements. Since its inception, over \$560,000 in rebates and incentives and \$320,000 in project cost savings transfers have been deposited into the Energy Fund and utilized to support energy improvement projects in City Hall, fire stations, and community centers.

City Energy Funds in the amount of \$100,000 were directed to the City’s General Fund as a result of Council approval of the FY 11-12 budget. This, and any future redirected funds, will have a significant impact on future projects and associated environmental and cost savings. As current federal stimulus monies are scheduled to end on December 2012, staff has initiated research to learn more about other financing options to continue City facility retrofits, including private sector energy service companies (ESCOs) and PG&E’s on-bill financing program.

## 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 2011 data is not available until mid 2012; 2011 will be calculated and reported in next year’s 2012 report. Approximately 2,463,456 metric tons (MT) of CO<sub>2</sub> equivalents were emitted based on citywide electricity and natural gas use in 2010. Per Capita Service Population Energy Use was 1.72 MT of CO<sub>2</sub> equivalents.

## Work Plan

Strategic Focus	Proposed Strategy	2011 Work Plan	2012 Work Plan
<b>Lead by Example</b>			
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 energy efficiency installations.	Complete 35 energy-efficiency projects.  Reduce municipal energy use by 5% from previous year.  <b>Status:</b> To date, 49 audits and 26 projects complete. Municipal energy use increased by 3% from previous year. <sup>1</sup>	Complete 45 remaining EECBG energy-efficiency projects.  Reduce municipal energy use by 5% from previous year.

<sup>1</sup> There was a minor increase in municipal energy usage from 2009 to 2010, due primarily to an increase in energy usage at the Airport (as a result of the airport expansion) and Water Pollution Control Plant (less onsite cogeneration due to equipment repairs resulted in an increased electricity purchase from PG&E).

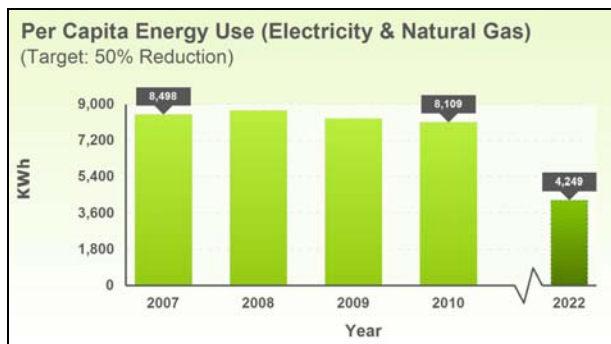


Strategic Focus	Proposed Strategy	2011 Work Plan	2012 Work Plan
<b>Advocating Policies</b>			
Identify & remove barriers to creating energy improvement areas and smart grids.	<p>Work with PG&amp;E, CEC and CPUC to advance use of energy areas or smart grids.</p> <p>Implement AB811 or PACE financing districts 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 cool communities, smart meters, and other energy opportunities.</p> <p><b>Status:</b> Ongoing.</p> <p>Support and coordinate with statewide partners currently developing alternatives to PACE for residential customers.</p> <p><b>Status:</b> Ongoing.</p>	Support and coordinate with statewide partners to develop a Commercial PACE program.
<b>Financing Mechanisms</b>			
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 to clean energy implementation.</p>	<p>Provide approximately 250 moderate-income homes with energy efficiency education, audits, and direct installation of energy efficiency measures. Work with PG&amp;E to identify additional sources of funds to allow expansion of the program beyond pilot phase.</p> <p>Commence both Innovator Pilot Programs.</p> <p><b>Status:</b> Commenced Community Energy Champions Grants program and Municipal Whole House Rehabilitation Pilot.</p>	<p>Continue and complete two Innovator Pilot programs.</p> <p>Evaluate different funding models to support energy efficiency projects beyond pilot programs.</p>
<b>Strategic Partnerships</b>			
Expand knowledge and awareness of energy efficiency program resources.	Work in partnership with businesses, energy resource providers, Bay Area Air Quality Management District, Santa Clara County and cities, and community organizations to	<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</p>	<p>Continue to refer residents to EUC Santa Clara County program.</p> <p>Better Buildings Program implementation will continue through September 2012. Will seek extension options with DOE through September</p>

Strategic Focus	Proposed Strategy	2011 Work Plan	2012 Work Plan
	<p>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>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&amp;E and Santa Clara County cities to identify additional neighborhoods for implementation.</p> <p><b>Status:</b> In 2011, the Better Buildings Program reached over 160 homes.</p>	<p>2013 to leverage energy efficiency upgrades in additional neighborhoods.</p>
<b>Communications and Engagement</b>			
<p>Implement community-wide energy efficiency programs.</p>	<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>Status report to Council on implementation of Strategic Action Plan in March 2011.</p> <p><b>Status:</b> Complete.</p> <p>Implementation of Better Building Program and Innovation Pilot program.</p> <p><b>Status:</b> Commenced pilot programs.</p> <p>Continue quarterly updates and ongoing enhancements of Silicon Valley Energy Map.</p> <p><b>Status:</b> Due to staffing and resource limitations, the SVEW map was not updated in 2011. Updates will occur in 2012.</p> <p>Develop Energy Efficiency Exhibit as part of San José Green Vision Clean Energy</p>	<p>Will seek extension options with DOE through September 2013 to leverage energy efficiency upgrades in additional neighborhoods.</p> <p>Complete major update to Silicon Valley Energy Map.</p>

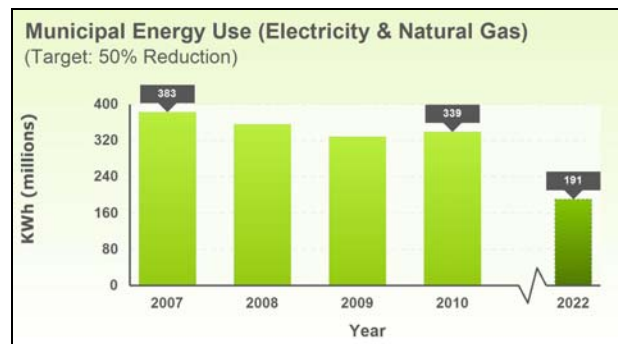
Strategic Focus	Proposed Strategy	2011 Work Plan	2012 Work Plan
		<p>Showcase.</p> <p><b>Status:</b> Complete.</p> <p>Implement community Energy and Environment fairs in at least 4 Santa Clara County low/moderate income neighborhoods as part of the moderate income residential program. Work with City Council Districts to ensure energy presence at district community events.</p> <p><b>Status:</b> Complete.</p>	

## Performance Metrics



**2009: 8,295 kWh**

2011 electricity usage data is not available from PG&E until July 2012 and will be updated as those figures are available.



**2009: 328 kWh (millions)**

2011 electricity usage data is not available from PG&E until July 2012 and will be updated as those figures are available.

## 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.*



1.24 MW Solar Installation at Central Service Yard

### Achievements & Successes:

By the end of 2011, 3,274 solar photovoltaic (PV) systems with a total capacity of approximately 44.4 MW had been installed in San José. This is the equivalent to 11,099 four-kilowatt (kW) residential systems and continues the City's leadership in solar installations in California and the nation.

### Solar on City Facilities:

*Central Service Yard* – On April 27, 2011, Mayor Reed, DRI Energy and SunEdison celebrated the activation of a 1.24 megawatt (MW) solar deployment at the City's Central Service Yard located at 1661 Senter Road. Comprised of more than 5,300 photovoltaic solar panels and deployed on the rooftops and new parking canopies, the solar power systems are expected to generate more than 1.8 million kilowatt hours (kWh) of electricity in the first year alone and more than 33 million kWh over 20 years. The City will use all of the energy produced at this facility to offset energy demand from the grid. The solar power systems were financed through a Power Purchase Agreement (PPA) and deployed with no upfront costs to the City.

*Solar on City Facilities and Lands* – In June of 2010, the City released a Request for Proposals for solar on municipal sites. On September 27, 2011 City Council adopted a resolution approving a form PPA for 28 sites (i.e. those that were preliminarily estimated to be financially beneficial to the City) and authorizing the City Manager or designee to execute PPAs with SolarCity through June 30, 2013. Staff is working with SolarCity on installations at the first four sites: Kelley Park – Senter Road Lot, Municipal Water Office, PAL Sports Center, and South Service Yard. Notices to proceed with design are subject to the following limitations: 1) must be cash flow positive in years 5 - 20, 2) meet private activity analysis clearance, 3) receive financing and landlord consent, and 4) meet parkland and California Environmental Quality Act (CEQA) clearance.

#### **Easy Actions You Can Take Now**

1. Complete an energy audit and take advantage of all the cost-effective ways to save energy and money in your home or business. 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](http://www.gosolarcalifornia.org).

*Muni Water* – The Municipal Water Program is planning to purchase and 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.

*San José Environmental Innovation Center* – As mentioned in the Goal 1 Chapter, the City of San José secured a \$2.35 million grant from the Economic Development Administration (EDA) of the U.S. Department of Commerce for the procurement and installation of solar photovoltaic panels, micro-inverters, and a solar tracking system for the Environmental Innovation Center (EIC). The size of the PV system is anticipated to make the EIC a net-zero electrical facility (i.e. the amount of electrical energy produced on-site will equal the amount of electricity used by the building when in operation). Installation of this PV system may help earn additional points towards Leadership in Energy and Environmental Design (LEED) certification. More details about the EIC are described in the Goal 5 chapter.

### Demonstration Partnerships:

*Armageddon Energy* – As a result of the City’s Request for Interest (RFI) and in accordance with the City’s Demonstration Partnership Policy, an agreement was approved in April 2011 with Armageddon Energy for the installation of a one kW solar array on the rooftop of the Council Wing at City Hall. Armageddon Energy manufactures the *SolarClover*, a hexagonal shaped solar panel which was also on display at the Clean Energy Showcase across from City Hall. Installation was completed in September 2011 and interconnection is pending product Underwriters Laboratories (UL) certification.



1 kW SolarClover at City Hall Wing

**Renewable Energy at the Plant:** The San José/Santa Clara Water Pollution Control Plant (WPCP) typically receives about two-thirds of its power from methane from its own processes and the adjacent landfill. After conducting a Request for Proposal (RFP) for a solar PV power purchase agreement and subsequently selecting SunPower through the Best and Final Offer (BAFO) Process, the City rejected all bids as the system cost would not provide financial savings to the WPCP over the 20 year life of the project. The WPCP also completed a RFP for a fuel cell project and began design work in 2011 for a 1.4 MW system. The City has also entered into an agreement to lease 40-acres of the WPCP Lands to the Zero Waste Energy Development (ZWED) Company to site a privately run dry anaerobic digestion (AD) facility to eventually create methane gas, which can be converted into electric power or vehicle fuel.

**Solar America Cities (SAC) Grant:** In 2011, San José continued to implement programs funded by the United States Department of Energy (DOE) Solar Market Transformation Special Project grant (commenced July 2009). As funding from the American Recovery and Reinvestment Act concluded (December of 2011), there are no longer resources to have an effective education and outreach on community solar. The City will continue to monitor new grant funding opportunities.



Highlights of the San José Solar America Cities program include:

- Green Vision Clean Energy Showcase
- Bright Green Day
- Solar and Energy Efficiency Fair
- San José Solar Home Tour
- SunShares
- Workforce Training Collaboration with area schools and training organizations to increase green jobs



*Green Vision Clean Energy Showcase*

*Green Vision Clean Energy Showcase* – The Showcase was the first outdoor demonstration site of large scale, cutting-edge solar, wind, electric vehicle and energy efficiency technologies in the United States. Since opening in December 2010, over 6,500 attendees toured the Showcase. Staff conducted presentations to large groups including nonprofit organizations, workforce training programs, and students ranging from elementary school to college. In November 2011, the Showcase was dismantled due to the conclusion of the Solar America Cities grant and no available funding to continue staffing tours. Some of the displays have been moved to other nearby cities and organizations to continue informing the community about clean energy.

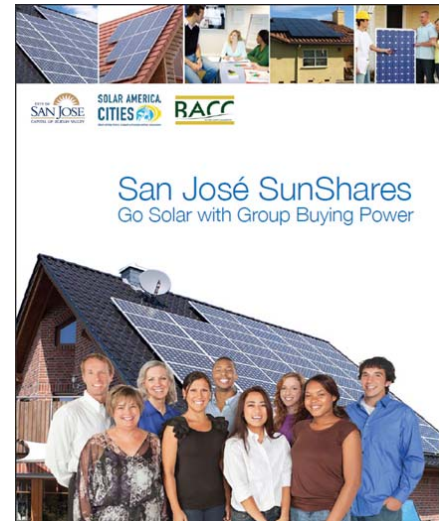
*Bright Green Day* – On April 29, 2011, nearly 1,000 people attended Bright Green Day that was held at the City Hall Plaza. The zero-waste event included an array of activities including nine local food trucks, an electric vehicle display, environmental workshops, music performances, eco-face painting, a community art canvas, tours of the Clean Energy Showcase, a 22-foot interactive Earth Balloon, and a reusable bag challenge. The event showcased collective green efforts of the City and the broader community, including 45 local non-profit organizations and businesses, which help advance the Green Vision. The event was funded by the DOE Solar America Cities Program and through generous donations from Nissan, SunPower, World Centric, General Motors, Pacific Gas & Electric, SolarCity, Vectrix/Wattco, Santa Clara Valley Water District, and the Silicon Valley Community Newspaper.

*San José Solar Home Tour* – The City hosted a solar home tour on October 1, 2011, to acquaint residents with solar technologies that can reduce monthly energy bills. One dozen home owners, welcomed tour participants into their homes to talk about available incentives, the different types of solar technologies they installed, and how much money they are saving. As part of the non-profit American Solar Energy Society (ASES) National Solar Tour, the world's largest grassroots solar event, the free tour attracted nearly 400 participants locally. The City partnered with several organizations to host the tour, including ASES, DOE, and four local solar companies: Clean Solar, Freedom Solar, REC Solar, and SunWize.

**Solar America Cities Program  
Recognizes San José**

During the Solar America Cities Annual Conference, held in Philadelphia the week of April 25, 2011, San José was recognized for its outstanding efforts to promote and educate its residents and businesses on the benefits of solar energy. Specifically, the City was recognized for the development of the Green Vision Clean Energy Showcase, located across the street from City Hall, and the SunShares Employee Solar Group Buy program. Both of these innovative efforts are helping to transform the marketplace to make solar energy more affordable.

*SunShares* - After the City initiated a successful employee solar group buy model entitled "*SunShares*," the City worked with the Bay Area Climate Collaborative (BACC) to continue *SunShares* outreach, visibility, and education in the Bay Area. BACC has facilitated the development of the Technology Credit Union's "\$olarSmart" product, low cost financing for solar, which is offered to its more than 74,000 credit union members. To learn more please visit: [www.techcu.com](http://www.techcu.com). Additionally, KeyPoint Credit Union became an official sponsor of *SunShares* and is also developing a financing package for their 55,000 members. Several cities in the Bay Area have expressed interest in coming together to offer a *SunShares*-type program in their community, including: Oakland, Hayward, Palo Alto, Saratoga, Sunnyvale, Fremont, and the counties of Sonoma and Monterey. BACC continues to have conversations with these communities about *SunShares* (which have a combined population of 1,882,345 people). To learn more, please visit: [www.baclimate.org/impact/sunshares.html](http://www.baclimate.org/impact/sunshares.html).



*On March 25, over 50 representatives from banks, corporations, and local municipalities attended a workshop at City Hall to learn about SunShares.*

**Community Choice Aggregation (CCA):** On March 22, 2011, City Council directed staff to conduct an initial cost and benefit analysis of CCA and explore the potential of use of a CCA model to achieve Green Vision Goal #3 – Receive 100% of the City's electricity from renewable resources. The City Manager's Office and the Environmental Services Department initiated a research work plan conducted between April-August 2011 that included interviews of other cities pursuing CCA programs and documentation of state legislation and proceedings on CCA case studies. The Transportation and Environment (T&E) Committee report and recommendations were accepted on September 12, 2011 and then referenced and approved by City Council on October 25, 2011. The City will not proceed with further CCA efforts at this time, but instead, continue to monitor CCA efforts and return with possible recommendations for a work plan should the key uncertainties and benefits change. Additionally, in anticipation of the Solar America Cities Grant completion, the T&E Committee requested that a work impact analysis be done regarding the exploration of alternatives such as Smart Grid, Fees and Tariffs, Direct Access, and partnerships with California Public Utilities Commission (CPUC) and Pacific Gas and Electric (PG&E), and that it come back to the T&E Committee along with additional analysis related to commercial solar installations and public-private partnerships to advance solar installations.

## Legislation

On the State level, the City continues to actively monitor and, where appropriate, comment on legislation and regulation related to energy efficiency and renewables.

*SB 585 (Kehoe) – Extension of California Solar Initiative Funding* – Amends an existing law that requires the CPUC, in implementing the State solar Initiative, to ensure the total cost over the duration of the program does not exceed a specified sum, and imposes monetary limits on programs funded by charges collected from customers of certain electrical corporations. This law

requires the Commission to fund program shortfalls by allocating interest accumulated from customer collections and increasing customer collections and sets the discount rate for interest. The bill was approved and signed into law by the Governor on September 22, 2011.

**Council adopted support positions on the following state legislative proposals:**

*AB 512 (Gordon) – Local Government Renewable Energy Self Generation* – This bill amends existing law authorizing a local government to receive a bill credit for electricity exported to the electrical grid by an eligible renewable generating facility. It expands the definition of an eligible renewable generating facility to include a facility that has a generating capacity of no more than five megawatts. The bill was approved and signed into law by the Governor on October 6, 2011.

*SB 790 (Leno) – Community Choice Aggregation (CCA) enhancements for CCA formation* – This bill would require the CPUC to institute a rulemaking, proceeding by March 1, 2012, for the purpose of considering and adopting a code of conduct, associated rules, and enforcement procedures, to govern the conduct of an electrical corporation relative to the consideration, formation, and implementation of community choice aggregation programs and to implement the code of conduct, associated rules, and enforcement procedures by January 1, 2013. The City took a support position on this legislation as it would set out clear rules and procedures for CCA development. The bill was approved and signed into law by the Governor on October 8, 2011.

**Council adopted an oppose position on the following state legislative proposals:**

*AB 976 (Hall) – Community Choice Aggregation Restrictive Contracting Purchase Rules* – This bill would prohibit a person, firm, or subsidiary thereof, which has been awarded a consulting services contract for advising a public entity on the feasibility of creating a community choice aggregator, as defined, from submitting a bid for, or being awarded a contract for any work including the procurement of electric supply and renewable energy credits, or any other related action which is required, suggested, or otherwise deemed appropriate in the end product of the consulting services contract. The last action on this bill was that it was to have a second hearing with the Senate Energy, Utilities and Communication Committee but it was canceled at the request of author.

## ***Strategic Direction***

In January 2011, the City was notified by PG&E that the California Solar Initiative (CSI) funds for non-residential (commercial, industrial, government, etc.) projects in PG&E's service territory had been fully allocated. The exhaustion of funds, which were eventually replenished, was 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 slowing effect on project development in this sector. 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 CSI rebates to be maintained as well as other initiatives and programs that will allow us to successfully advance our goal of 100% electricity from clean renewable sources. Another challenge that limits the ability to advance community solar is the conclusion of Solar America Cities grant funding for education and outreach activities (December 2011). A majority of other grants from the DOE will end by late December 2012.

The City continues to partner with PG&E to develop renewable energy generation and energy efficiency projects on City facilities, businesses, and residential homes throughout San José. The City remains a national leader in solar roof installations and leads the community with programs such as the Silicon Valley Energy Map and the Employee Solar Group Buy Program, while partnering with companies such as SolarCity and ZWED to increase renewable energy generation on City facilities and at the WPCP.

## Climate Change

Currently the State requires energy providers to increase the mix of renewable energy included in their energy portfolios to 33% by the year 2020. San José's currently receives the bulk of its electricity from PG&E. 2011 verified PG&E data is not available until mid 2012, as a result 2011 GHG emissions will be calculated and reported next year. San José's total electricity use in 2010 was 5,281,690,474 kWh and resulted in 1,322,561 metric tons (MT) of CO<sub>2</sub> equivalents.

## Work Plan

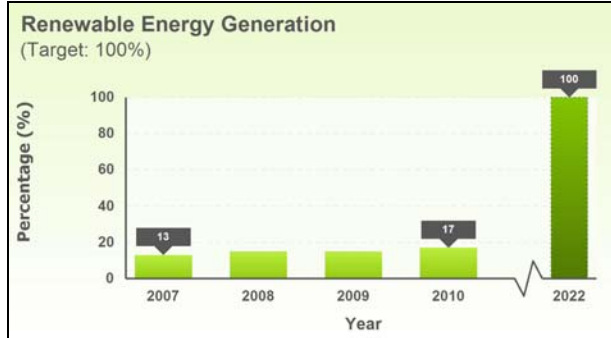
Strategic Focus	Proposed Strategy	2011 Work Plan	2012 Work Plan
<b>Lead by Example</b>			
Install solar on City facilities.	Power Purchase Agreement RFP finalized and available for all City facility solar projects; remove barriers to solar installation for all City facilities.	Complete analysis of, and prepare recommendations for additional municipal solar installations as based on submitted proposals.  <b>Status:</b> Awarded City facilities solar RFP to SolarCity. Working on first 4 City facilities.	Install solar on a minimum of 4 City facilities.
<b>Advocating Policies</b>			
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.	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.  <b>Status:</b> Ongoing, provide input on CPUC rulings and draft legislation.	Participate on the Local Government Sustainability Commission and the City will continue to monitor and provide input on CPUC rulings and draft legislation.
<b>Financing Mechanisms</b>			
Support solar programs for rental markets;	Work with city departments, CPUC, PG&E, and CEC to	Work with the new Energy Upgrade California, funded by the CEC and others	Continue to work with other City departments, external stakeholders, and PG&E

Strategic Focus	Proposed Strategy	2011 Work Plan	2012 Work Plan
and other innovative financing mechanisms.	implement solar programs for multi-family and low income residents; Develop integrated financing offerings for the community.	under the State Energy Program to promote financing opportunities for San José sectors.  <b>Status:</b> Initiated discussions with industry stakeholders to identify areas where the City could play a role to help accelerate wide spread adoption of energy efficiency investments and solar installations.	on financing mechanisms for solar.
Pursue implementation of clean energy municipal financing for the community.	Participate in regional efforts and examine development of City-wide clean energy financing.	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.  <b>Status:</b> Working group will be convened in early 2012 to develop next steps.	Will continue discussions with community groups on what, if any, role the City should play.
<b>Communications and Engagement</b>			
Expand knowledge and awareness of renewable energy program resources.	Work in partnership with businesses and organizations throughout community.	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.	<i>Not applicable.</i>  Nothing planned in 2012 due to lack of resources.



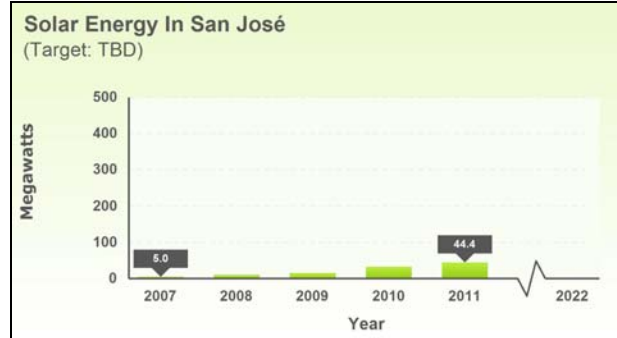
Strategic Focus	Proposed Strategy	2011 Work Plan	2012 Work Plan
		<p><b>Status:</b> ESD leveraged SAC grant to develop the <i>Bright Green San José</i> concept to help advance all of the City's environmental Initiatives.</p>	

## Performance Metrics



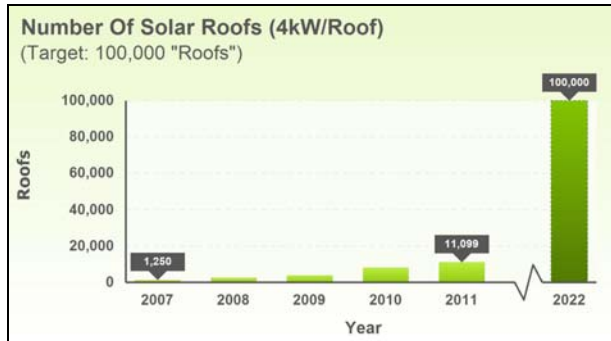
**2009: 15%**

2011 electricity usage data is not available from PG&E until July 2012 and will be updated as those figures are available.



**2010: 32.5 MW**

2010 figures were updated to reflect final PG&E electricity usage data, PG&E electricity generated from solar. 2022 target to be determined.



**2010: 8,131 Roofs**

2010 figures were updated to reflect final PG&E electricity usage data, PG&E electricity generated from solar.

## 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.*



*SolFocus Ribbon Cutting - August 12, 2011-  
First LEED- CI (Commercial Interiors) Platinum certified  
building in San José.*

### Achievements & Successes

Currently San José has over 5.4 million square feet of certified public and private green building space with another 9.7 million square feet of green space in design or construction. This includes 4 million square feet of private sector development and 1.4 million square feet of City facilities that have achieved green building certification since 2007.

#### Private Sector:

*Green Building Ordinance for Private Sector New Construction* – In October 2008, the City of San José adopted the Private Sector Green Building Policy. In June 2009 the Green Building Ordinance for Private Sector New Construction went into effect. These actions established Build it Green and the U.S. Green Building Council's (USGBC) Leadership in Energy and Environmental Design (LEED) rating programs as mandatory green building standards for certain new private development projects. In general, residential projects of more than 10 units and non-residential projects in excess of 25,000 square feet (ft<sup>2</sup>) are required to pay a green building deposit (30 cents per square foot, \$30,000 ft<sup>2</sup> maximum). The deposit is refundable when formal certification from Build it Green or USGBC at the required level is achieved. Projects of a size below the thresholds for certification are required to submit a green building checklist for informational purposes.

In 2011, 26 projects were filed with the Planning Division of the Department of Planning, Building and Code Enforcement that were determined to be subject to the policy and ordinance. Sixteen of the projects were of a size that triggered the requirement to be certified by Build it Green or USGBC and will be required to pay the Green Building Deposit when Building Permits are filed. In November, Bellarmine College Preparatory received LEED Gold Certification for a new classroom building of approximately 50,000 square feet. This is the first project to receive a refund of a Green Building Deposit.

#### 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](http://www.greenseal.org).

Thus far, the City has collected Green Building Deposits for seven projects:

- Bellarmine Academic Building: 53,000 ft<sup>2</sup>
- Bellarmine Student Center/Auxillary Gym: 40,000 ft<sup>2</sup>
- Airport Parkway Casino: 88,000 ft<sup>2</sup>
- Willow/Lincoln Commercial: 42,000 ft<sup>2</sup>
- Regional Medical Center: 161,000 ft<sup>2</sup>
- Fleetwood Almaden Estates 16 Single Family Homes (~ 2,000 ft<sup>2</sup> each): 32,000 ft<sup>2</sup>
- Cadwallader Single Family: 11,429 ft<sup>2</sup>

The number of deposit refunds will likely increase in 2012 as sufficient time will have transpired to allow projects to obtain certification.

*CALGreen: California Green Building Standards Code* – The California Green Building Standards Code (CALGreen) went into effect on January 1, 2011, requiring mandatory and voluntary measures for new residential and nonresidential buildings (including buildings for retail, office, public schools and hospitals) throughout California.

### City Facilities:

*New Construction* – Six City facilities totaling 266,824 square feet, achieved LEED certification in 2011:

- Edenvale Community Center (Gold)
- Educational Park Branch Library (Gold)
- Environmental Services Building (Gold)
- San José International Airport Terminal B (Silver)
- Santa Teresa Branch Library (Certified)
- Seven Trees Community Center and Branch Library (Gold)

### Post-Construction Urban Runoff Management Policy:

In October 2011, the City of San José updated the Post-Construction Urban Runoff Management Policy in order to be consistent with the San Francisco Bay Region Municipal Regional Stormwater National Pollutant Discharge Elimination System (NPDES) Permit. The purpose of this policy is to establish specific requirements to minimize and treat stormwater runoff from new development and redevelopment projects. This Policy is consistent with the City's Green Vision and Green Building Policies/Ordinances and results in associated benefits including energy and water conservation, protection of local streams from pollution and high volumes of stormwater runoff, and enhancing the beneficial use of local waterways. To learn more, please visit:

[www.sanjoseca.gov/planning/stormwater](http://www.sanjoseca.gov/planning/stormwater)



*Seven Trees Community Center and Library  
Certified LEED GOLD*

This brings the total municipal Green Building square footage to 1,453,690 square feet. Several additional City facilities are in various phases of design and construction and at least four, including the Bascom Community Center and Branch Library and the San José Police Department South Substation, are anticipated to receive certification in 2012.

*Existing Buildings* – In 2010, USGBC announced the LEED Volume Program to help streamline certifications for new construction. Then in June 2011, USGBC announced a new track focused

on the operations and maintenance (O&M) needs of existing buildings. San José is the only city to participate in the LEED Volume Program for Existing Buildings: O&M. The main objective of the LEED Volume Program is to streamline the certification process for property owners and managers of high-volume existing buildings and new construction projects. This new program enables large-scale builders, owners, and managers to earn LEED certification faster at a lower cost than through individual certifications, and helps achieve consistency in green building improvements, operation and maintenance. Through its participation in the LEED Volume Program for Existing Buildings, the City will have the opportunity to certify at least 25 of its existing City facilities over the next several years.

## Legislation

Beginning in July 2012, the disclosure of energy performance data to potential buyers or tenants will be required as result of new State requirements Assembly Bill (AB) 1103. Many large cities, including San Francisco, have instituted ordinances that require annual benchmarking of a building energy performance. Using EnergyStar, annual energy use data is compiled for the purposes of increasing an owner's awareness of a building's energy performance, identifying needed upgrades and facilitating the process of comparing the performance of similar type and size of buildings. Whether the City proposes similar requirements, or provides incentives that go beyond those at the State level, will continue to be evaluated.

## Strategic Direction

On November 16, 2011, San José hosted an event entitled *Catalyzing Energy Upgrades*, in collaboration with the Bay Area Climate Collaborative. The event included two panels, one focused on AB 1103 and benchmarking buildings' energy performance and the other on Property Assessed Clean Energy (PACE) funding programs. Staff is following up with stakeholders engaged in this panel discussion to explore ways to reduce both financial and practical barriers to pursuing projects that can significantly reduce a buildings energy use.

## Climate Change

The City of San José's Building Code requires new buildings to achieve certification using either the Build It Green or USGBC's rating systems which strive to optimize the energy performance of buildings. The City of San José has one the largest percentages of municipal certified green



**Belovida at Newbury Park Senior Apartments** exemplifies affordable housing for today's active seniors seeking to maintain a healthy and vibrant lifestyle. Constructed by Core Affordable Housing, LLC, a San José-based affordable housing developer, Belovida is a 5-story building with 184 affordable one-bedroom rentals designed to create an environment of wellness for seniors (aged 55 and older). Belovida was built to green certification features, including installation of: extensive photovoltaic panels to meet common electrical needs, a high efficiency irrigation system, Energy Star appliances, water efficient fixtures, ceiling fans, reduced light pollution, and environmentally friendly paints, adhesives, and insulation. To learn more, please visit: <http://www.belovidanewburypark.com/>

buildings in California. While retrofitting existing municipal buildings will reduce some greenhouse gas emissions, more emissions may be avoided by planning new green building sites that focus on improving the surrounding area to encourage less vehicle trips, contributes to reducing other emission that impact public health such as carbon monoxide, nitrogen oxides, organic gases, sulfur oxides, and particulate matter. As a result, the positive impact Green Buildings have on Climate Change is closely tied to Green Vision Goal 7 – Adopt a General Plan with Measurable Standards for Sustainable Development. More details are described in the Goal 7 chapter.

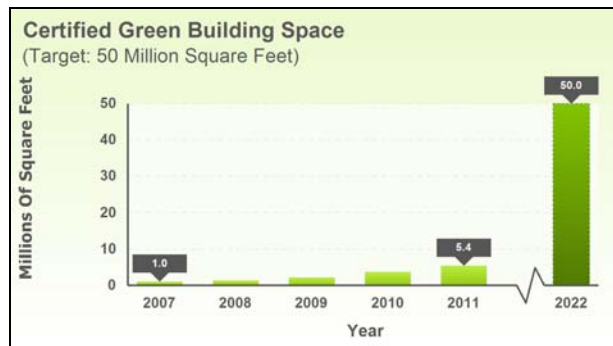
## Work Plan

Strategic Focus	Proposed Strategy	2011 Work Plan	2012 Work Plan
<b>Lead by Example</b>			
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.	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.  <b>Status:</b> The City continues to implement the Green Building Policy and mandatory CALGreen measures. No Policy changes anticipated in the upcoming year.	Track State AB 1103 and specific requirements for energy benchmarking and disclosure to facilitate energy upgrades to existing commercial buildings.
Certify existing City facilities using LEED-EB Rating System.	Participate in USGBC Portfolio Program (now known as the Volume Program).	Certify four City buildings under LEED-EB Portfolio Program.  Evaluate strategy to certify additional City facilities under the Portfolio Program.  <b>Status:</b> USGBC Portfolio Pilot Program transitioned to the LEED Volume Program for EB in June 2011. The City registered to participate in this program in July 2011.	Complete protocol precertification.  Identify and pursue new funding sources that are aligned with program objectives.
<b>Communications and Engagement</b>			
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.	Engage stakeholders on implementation of Green Building Policy for new construction and CALGreen to inform potential policy on renovations and retrofits.	<i>Not applicable.</i>

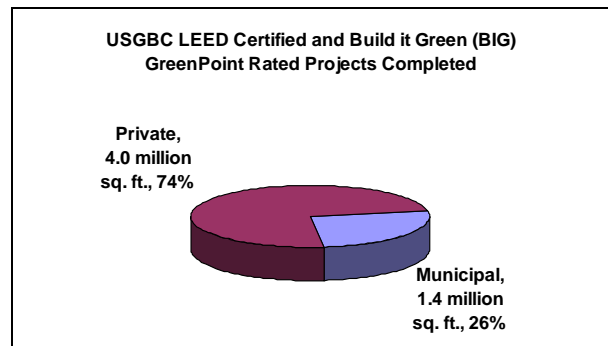


Strategic Focus	Proposed Strategy	2011 Work Plan	2012 Work Plan
		<p><b>Status:</b> November 16 panel discussion convened.</p>	
Promote green building for private sector new construction through staff interactions with the public.	Develop outreach materials to support Private Sector Green Building Policy for New Construction and showcase municipal facilities.	<p>Update Outreach Material to reflect CALGreen requirements.</p> <p><b>Status:</b> Continue ongoing outreach and education activities including staff training, communication with stakeholders in the development community.</p>	Conduct additional outreach and education for staff and development community.

## Performance Metrics



**2010: 3.7 million square feet**



*2010: Private Sector accounted for 68% 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.*



*Recycle At Work Supplies*

### **Achievements & Successes:**

**Waste to Energy:** San José has prioritized the following strategies as a phased implementation plan to convert waste to energy:

*Develop Anaerobic Digestion Technology* – In 2011, the City made significant progress toward developing a commercial-scale anaerobic digestion (AD) facility adjacent to the San José/Santa Clara Water Pollution Control Plant (WPCP), which will be owned, managed, and operated by the Zero Waste Energy Development Company, Inc. (ZWED). AD of organic waste creates methane gas, which can be converted into electric power or vehicle fuel. Also in 2011, a Commercial Solid Waste Processing agreement and a 30-year land lease for the Nine Par site were both finalized between the City and ZWED. The project was granted a California Environmental Quality Act (CEQA) negative declaration, and ZWED is now moving forward in the permitting process with construction slated to begin in 2012. The project is planned for build-out in three phases with each phase being capable of handling 90,000 tons annually of incoming organic waste material for an eventual total of 270,000 tons of organic feedstock per year.

*Feasibility Phase Begins for Biomass-to-Fuel Technology* – The City signed agreements with the California Energy Commission (CEC) and Harvest Power to begin a Gasification Feasibility Study that is part of a \$1.9 million grant to the City from the CEC. Analysis is underway as part of an extensive year-long feasibility study to test the potential for development of a small demonstration-scale facility at the WPCP. Key efforts include technical analysis with the technology provider Agnion technologies, permitting review with Local Enforcement Agents and CalRecycle, and proactive stakeholder engagement with the Bay Area Biosolids to Energy Coalition, California Biomass Collaborative, University of California (UC) Davis, CalRecycle, and other municipalities including Palo Alto and

#### **Easy Actions You Can Take Now**

1. Bring 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](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.

San Francisco. This effort would test the ability of a new technology to convert clean wood waste and biosolids into transportation-fuel-quality biomethane and showcase San José's leadership in driving emerging technologies that create energy from waste.

**Commercial Solid Waste System Redesign:** The new commercial solid waste collection and organics processing services will provide the most comprehensive and innovative commercial solid waste and recycling system in the United States (U.S.). Benefits of the new system include more options for customer waste recycling and collection, reasonable and equitable service rates, a new "green" fleet of approximately 50 compressed natural gas (CNG) solid waste collection trucks to replace the existing aging fleet, a brand new first-of-it's-kind materials recovery facility, stable franchise fee revenue for the General Fund, increased waste diversion, progress toward renewable energy goals, and the creation of approximately 200 additional green recycling jobs in San José.

On June 21, 2011, San José City Council adopted a resolution authorizing the City Manger to negotiate agreements with Allied Waste Services for commercial solid waste and recyclable material collection services. Staff will return to Council in 2012 with proposed ordinances and resolutions for adoption which are needed to implement the new commercial solid waste system, including establishment of maximum customer service rates. The new system is expected to begin in July 2012 and staff is working diligently on transition efforts. This redesign effort will help position the City to meet or exceed the requirements of Senate Bill (SB) 341 which mandates commercial businesses to divert 75% of their waste from landfill and Assembly Bill (AB) 32, the California Global Warming Solutions Act of 2006.

**San José Hosts National Compost Conference:** On January 24-27, 2011, the City co-hosted a record-breaking U.S. Composting Council Conference, drawing more than 1,000 participants to San José and Santa Clara. The event promoted San José and its Green Vision to regional and national waste diversion and renewable energy experts. City staff gave five presentations, including participation in the opening plenary, that showcased leading-edge San José waste diversion and organic management efforts. In addition to workshops and technical sessions, hands-on activities included equipment demonstrations as well as tours of Newby Island Resource Recovery Park, Zanker Road Resource Recovery operations, and the WPCP. San José then hosted a second Waste to Energy Conversion Congress on December 6 and 7, at the Convention Plaza Hotel in downtown San José. Representatives from the federal government (U.S. Department of Agriculture and Energy), regional regulators (Bay Area Air Quality Management District and the State of California), and local governments were in attendance.

### **City Facilities, Events and Venues Recycling:**

*Events Recycling* – During 2011, the Special Events and Venues Recycling Program served approximately 60 events, with many events receiving first-time assistance. Of the events reporting data back to the program, 55 tons of material was diverted from landfill, achieving a 92% diversion rate. The Green Event Grant program provided \$45,000 in assistance for thirteen events that implemented full-scale recycling and compost collection services, which represented an increase of 75% in participation in the grant program as compared to last year. These events used alternatives to expanded polystyrene (EPS) food service ware and marketed their green programs via social media. Staff collaborated with the California Resource Recovery Association, a statewide recycling association that focuses on increasing the awareness of State and local waste diversion and recycling requirements, to provide tools and education to the event

organizers. The Zero Waste Event Program website is designed to provide resources and information to help event planners:

- Understand the planning cycle for production of a sustainable event
- Successfully collect and divert recycling and compostable materials
- Transition to sustainable product options
- Comply with City and State reporting requirements
- Receive recognition for their efforts

To learn more, please visit: <http://www.sjrecycles.org/events-venues/>.



*Eco-friendly decorations at  
Christmas in the Park*

*Greening the San José Experience* – During the 2011 holiday season, the Environmental Services Department (ESD) hosted several special exhibits and activities at Christmas in the Park and Downtown Ice to ensure that these popular venues become sustainable for future generations. Participants were able to tour the first-ever Bright Green Tree Zone, which included living, potted Christmas trees watered with recycled water and decorated with creative eco-friendly decorations made by community members. City staff and volunteers from a local girl scout troop provided two opportunities for participants to make reusable bags from t-shirts as well as other interactive family activities, music, prizes and free reusable bags. Christmas in the Park applied for Zero Waste Event Certification to recognize their sustainable actions, which included designating the event as a Plastic Bag Free Zone, using compostable and recyclable service ware, providing eco-stations for recycling and composting, and developing “Bright Green Spot” signage to educate sustainable elements of the event and encourage behavior change at home. As a result of creative outreach efforts and the level of waste diversion achieved, Certification of Christmas in the Park has been awarded Zero Waste Certification. Staff plans to coordinate with the Office of Cultural Affairs to reach out to event organizers in order to green more events.

*City Facilities* – The City Facilities Garbage and Recycling program that serves 140 City facilities including parks, libraries, community centers, the Mineta San José International Airport, the Convention Center, and City Hall achieved an 84% recycling rate in 2011, which continued to be the highest rate of any municipal recycling program in the nation. In 2012, the City will explore creative ways to repurpose and reuse items more effectively to reduce waste while also reducing costs for new supplies. Staff intends to research the impact of EPS service ware and develop a City policy to limit the purchase and use of EPS at City facilities and City-sponsored events that receive City funding or in-kind services.

**Construction & Demolition Recycling Diversion Rate Increases:** Construction and demolition (C&D) waste represents approximately 30% of the City’s overall waste disposal. The City’s Construction and Demolition Diversion Deposit (CDDD) Program, in conjunction with the California Green Building Standards Code (CALGreen) diversion requirements, ensure that 60% of C&D waste is recycled, reused, or otherwise diverted from landfill burial. In 2012, the City plans to increase the diversion requirement to 65%, and then to 75% in 2013, as

recommended in a 2009 program evaluation. The increased diversion rate encourages C&D facility operators to improve and expand process capabilities and increase diversion of C&D waste from the landfill.

**Residential Program Highlights:** The ESD residential services group manages contracts for Recycle Plus garbage, recycling, yard trimmings, and street sweeping services for single-family and multi-family dwelling (MFD) properties. In 2010, the City Council approved new contracts that will replace the current Recycle Plus agreements that are set to expire in 2013 and facilitate program enhancements that would enable achievement of Green Vision Goal 5. The new contract (from July 1, 2010 through June 30, 2021) will include low-emission collection vehicles that run on CNG fuel and higher recycling diversion requirements. August 2011 marked the conclusion of the Food for the Earth pilot program, which include the Yard Trimmings Cart, Garbage Processing, and Food Scraps Recycling pilot projects. The results of the pilots are being analyzed to identify future program enhancements that will be included under the new contracts.



*Single-Family Household Curbside Recycling*

*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. In October 2011, the NCU events began accepting pharmaceutical drop-offs. This program enhancement gave the public the opportunity to safely dispose of expired, unwanted, or unused pharmaceuticals found in their homes. The collection of pharmaceuticals at NCU events helps prevent chemicals used in the drugs from entering local waterways and groundwater.

*New Online Collection Day Look-up* – San José’s new online Collection Day Look-up tool provides a convenient way for single-family residents to find their garbage, recycling, and yard trimmings collection day, street sweeping schedule, and service provider contact information. Entering a street number and zip code into the online form instantly retrieves the information from a utility billing system database. The online tool, developed in-house by staff from the Information Technology Department and ESD, enhances the existing customer service infrastructure, adding 24-hour convenience and potentially reducing the need for some telephone inquiries. The online tool also eliminates the need for more than 200,000 paper calendars that were previously distributed annually, thus reducing paper waste and costs, and furthering the City’s efforts towards Zero Waste. To learn more, please visit:

<http://www.sjrecycles.org/lookup.asp>

**E-Stewards Enterprise:** On November 9, 2011, San José became the first city in the U.S. to earn the e-Stewards Enterprise recognition. The E-Stewards Enterprise program recognizes companies, institutions, and governmental bodies that commit to making best efforts to uphold the highest standards for the responsible management of electronic waste. The City’s Environmentally Preferable Procurement Policy (Council Policy 4-6) and its recycling service agreements with private haulers ensure that all electronic waste collected from San José homes, municipal facilities, and City-sponsored events are processed according environmentally safe standards.



**San José Environmental Innovation Center:** As mentioned in the Goal 1 and 3 chapters, the San José Environmental Innovation Center will house a Habitat for Humanity ReStore to sell discounted new, like-new, and surplus construction materials, and a Household Hazardous Waste (HHW) drop-off facility. ReStore will provide the surrounding community an opportunity to purchase building and home improvement materials at more affordable prices than chain retail stores (e.g. 50% less costly). Furthermore, ReStore provides an environmentally and socially responsible way to keep good, reusable materials out of the waste stream and aid the City to achieve its goal of Zero Waste. The HHW drop-off facility will provide residents with the needed infrastructure to conveniently, safely, and legally dispose of common toxic residential waste (e.g. batteries, cleaning chemicals, fluorescent light bulbs, and paint). It is estimated that more than 25,000 drop-off appointments will be accommodated at this facility annually. Renovation of the existing 40,000 square foot warehouse building (which was built in 1958) and construction of a new 10,000 square foot building for the HHW facility began in October 2011. Staff estimates construction will be complete December 2012 and open in 2013.

**Go Green Schools:** In 2011, the City’s Go Green Schools Program launched a new website to better connect San José schools—kindergarten through Grade 12 (K-12)—with free recycling supplies and other green resources that encourage them to “Go Green.” The program’s new website integrates environmental resources from several sites related to schools into a single user-friendly location for educators, school administrators, parents, and students. The website launch was timed to help promote the program’s fifth annual Bay Area Schools Environmental Conference held on April 30, 2011 at the Mexican Heritage Plaza in San José. The Go Green Schools program continued its flag-ship Mini-grants program, which provided grants of \$500 to \$5,000 to fund 39 projects in 2011. Go Green also continued to work with Resource Area for Teaching (RAFT) to provide more than 3,500 containers to 150 K-12 schools in 2011 for classroom recycling collection. Finally, Go Green is collaborating with non-profit and agency partners (StopWaste.org, San Mateo RecycleWorks, and the Green Schools Initiative) to develop the Green Star Schools certification program. Ten pilot San José schools participated in 2011 and earned Green Star certification to demonstrate their sustainability efforts. To learn more, please visit: [www.sanjoseca.gov/esd/schools](http://www.sanjoseca.gov/esd/schools).



*Exhibitors at the 2011  
Bay Area Schools Environmental Conference*

## Legislation

Staff has continued to follow and support the process of the mandatory commercial recycling element of AB 32 by attending meetings, providing input, and serving as a model city in the process. However, late in 2011, AB 341 was passed which requires 75% diversion through mandatory commercial recycling. As a result of the overlap of these two bills, the State has incorporated its previous work on AB 32 into AB 341. Due to previous San José successes with MFD diversion and the expected increase in diversion with the commercial redesign, this legislation should not alter our programs because as designed, they already support achieving diversion at this or higher levels. In August 2011, Council approved taking an oppose position on AB 1178 which, if passed, would prohibit an ordinance enacted by a city or county, including one enacted by the voters, from restricting or limiting the importation of solid waste into a

privately owned solid waste facility based on place of origin. The oppose position was recommended to protect local control, protect and increase local funding, and promote livability, sustainable development, and environmental protection. The bill was referred to the State Senate Environmental Quality Committee in September 2011.

### **Strategic Direction**

As staff continues implement integral programs to divert waste from the landfill, such as special events recycling, the Go Green Schools program, and neighborhood clean-up, staff is also investing in long range planning efforts and infrastructure in order to save money and eventually help to achieve our Zero Waste goals. In 2012, staff will continue to pursue strategies to develop conversion technology infrastructure in San José, make significant steps in the redesign of the commercial garbage and recycling program, and complete major construction of the San José Environmental Innovation Center and HHW drop-off facility.

### **Climate Change**

San José is a national leader in diverting waste from landfills and avoiding increasing greenhouse gas (GHG) emissions. A majority of GHG emissions related to waste disposal comes from methane produced as byproducts of organic decay at landfills and the transport of waste to landfills. California has implemented methane capture rules and has developed a mandatory commercial recycling program regulation. San José’s redesigned commercial system will offer recycling to all commercial facilities, thereby diverting more waste from the landfill. Haulers are transitioning to cleaner burning fuels, reducing transportation emissions. In 2011, 540,000 tons of waste was trucked to a managed landfill resulting in 92,000 metric tons (MT) of CO<sub>2</sub> equivalents (2010 figures were 569,379 tons and 97,000 MT of CO<sub>2</sub> equivalents).

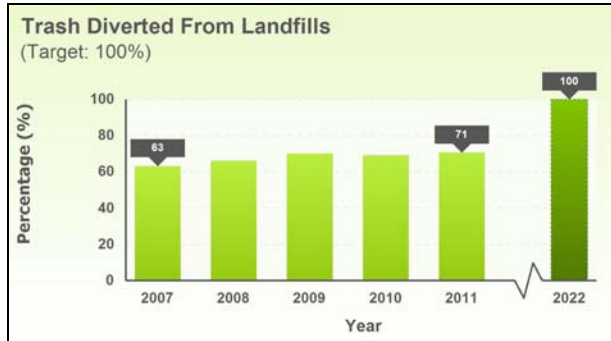
### **Work Plan**

Strategic Focus	Proposed Strategy	2011 Work Plan	2012 Work Plan
<b>Lead by Example</b>			
Advance Commercial Redesign.	Implement contracts with Allied Waste and Zero Waste Energy Development that offer a range of services to SJ businesses while complying with state mandated diversion and furthering Green Vision and other City policies.	Provide award recommendations to Council.  <b>Status:</b> Complete.  Complete franchise negotiations.  <b>Status:</b> In Progress.  Begin transition process to new exclusive franchise haulers.  <b>Status:</b> In Progress.	Complete transition process to Allied Waste and ZWED to go live on July 1, 2012.  As information becomes more available through transition and start of service, work with Allied and ZWED to ensure maximum recovery of materials.

Strategic Focus	Proposed Strategy	2011 Work Plan	2012 Work Plan
Streamline Construction Demolition Diversion Deposit (CDDD) program.	Develop new program/reporting requirements for C&D facilities.	<i>Did not have a 2011 work plan item.</i>	Develop outreach material to communicate waste diversion requirements for new construction projects.
Maximize diversion and safe disposal opportunities for residents.	Test and evaluate strategies to enable residents to divert additional materials safely and conveniently.	<p>Complete RecyclePlus pilot programs and evaluate results.</p> <p><b>Status:</b> Completed pilot programs, and currently evaluating results.</p> <p>Evaluate options for expansion of the NCU program.</p> <p><b>Status:</b> Complete.</p> <p>Pursue NMTC to complete Phase II funding. Begin Phase II construction of San José EIC in early Summer 2011 to provide permanent San José HHW collection site.</p> <p><b>Status:</b> Completed NMTC transaction. Phase II construction has started.</p>	<p>Finalize evaluation of results of RecyclePlus pilot programs and develop options for future program enhancements to achieve Zero Waste.</p> <p>Implement RecyclePlus recycling rewards pilot program to multifamily residents as a way to incentivize recycling, increase diversion, and decrease contamination of recyclable material.</p> <p>Complete EIC construction by December 2012. Prepare for opening of HHW facility in Spring 2013.</p>
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.	<p>Develop policies and programs to reduce litter.</p> <p><b>Status:</b> Developed single-use carryout bag policy.</p> <p>Submit ordinance to Council for adoption in Spring 2011.</p> <p><b>Status:</b> Complete.</p> <p>Initiate transition to support new ordinance.</p> <p><b>Status:</b> Developed <i>Bring Your Own Bag Campaign</i> engagement strategy and ordinance took effect January 1, 2012.</p>	<p>Evaluate options for expansion of the street sweeping program.</p> <p>Implement Council direction to halt the purchase and use of EPS food service ware at City facilities and City funded events.</p> <p>Continue to research impacts of a City-wide EPS policy and evaluate other alternatives for eliminating EPS litter.</p>

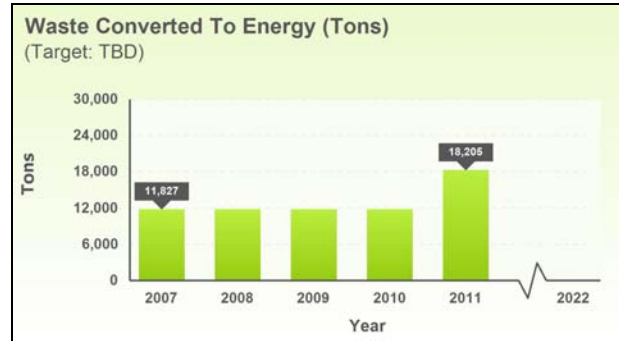
Strategic Focus	Proposed Strategy	2011 Work Plan	2012 Work Plan
Drive large San José events toward Zero Waste.	Provide education and assistance to event organizers and food vendors to increase waste diversion.	Develop comprehensive educational tools for zero waste event organizers.  <b>Status:</b> Developed resources available online, including <i>Greening Guidelines for Events</i> .	Expand Green Event Certification and Grant programs to cover additional events. Coordinate Green Event Grant process and timeline with OCA grant program and co-promote to events.
<b>Strategic Partnerships</b>			
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.	Begin construction of dry fermentation AD facility at Nine Par.  <b>Status:</b> In Progress  Conduct Feasibility study of gasification pilot unit.  <b>Status:</b> In Progress  Integrate conversion options into new commercial system design.  <b>Status:</b> Complete	Complete Landfill post-closure site preparation.  Complete Permitting Process for AD facility construction.  Begin feedstock testing for AD system.  Complete feasibility study for gasification pilot recommendations.  Meet contract milestones for construction of dry fermentation AD system.  Design and construct pilot FOG receiving station at the Plant.
<b>Communications and Engagement</b>			
Increase awareness about green initiatives at San José schools.	Provide educational opportunities for and assistance to schools about recycling and waste reduction, energy and water use reduction, healthy buildings, and transportation alternatives including the Safe Routes to Schools program.	Complete pilot Green Star School certification program.  Launch Green Star School certification program.  <b>Status:</b> 10 schools received Green Star certification. Working with partners to continue and expand certification program.	Conduct outreach to encourage participation in Green Star School certification program.

## Performance Metrics



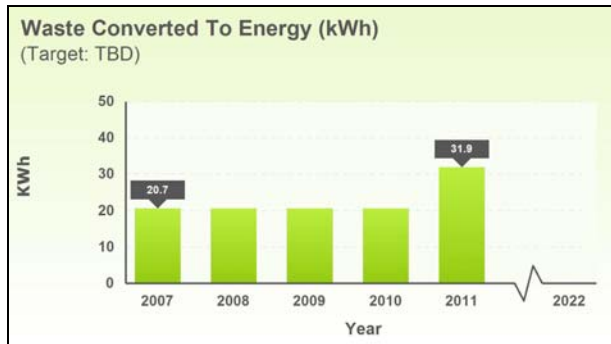
**2010: 69%**

The original diversion rate of 63% shown for 2007 was the most recent (2004) diversion rate approved by CalRecycle. The 2010 diversion rate has been updated to reflect data more recently provided by CalRecycle. 2011 data is still pending approval.



**2010: 11,827 Tons**

2022 target to be determined.



**2010: 20.7 kWh (Millions)**

2022 target to be determined.



## Recycle or Beneficially Reuse 100% of our Wastewater

*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 existing water supply makes the creation of new water sources increasingly critical.*

### Achievements & Successes

South Bay Water Recycling (SBWR) consists of over 130 miles of distribution pipeline currently serving customers in the cities of Milpitas, Santa Clara and San José. In 2011, SBWR connected 14 additional customers which increased recycled water delivery by ~0.1 million gallons per day or 1 %. Currently, SBWR provides an average of 8.1 million gallons per day of non-potable recycled water annually. However, overall recycled water delivery remained largely the same as experienced in 2010. The nominal growth in 2011 water delivery is again attributed to cooler temperatures and average rainfall, current economic conditions, and subsequent reductions in energy use. San José continues to work collaboratively with the Santa Clara Valley Water District (SCVWD) to increase recycled water use to 40 million gallons per day by 2022.



*Landscaping Irrigated With Recycled Water*

**Advanced Water Treatment Facility:** In October 2010, San José and SCVWD began construction of the Silicon Valley Advanced Water Purification Center (also known as the Advance Water Treatment Facility—AWT) that will employ microfiltration, reverse osmosis, and ultraviolet disinfection to purify secondary wastewater effluent. This highly purified water will then be blended with tertiary-treated recycled water to reduce the salinity or total dissolved solids of the final product water to 500 parts per million, improving the water quality for both irrigation and industrial non-potable uses. This jointly-funded \$56.1 million project has received an \$8.3 million grant from the United States Bureau of Reclamation (USBR) through the American Reinvestment and Recovery Act (ARRA), as well as a \$3.0 million grant from the California Department of Water Resources (DWR) through the Integrated Regional Water Management Grant Program. Construction milestones achieved in 2011 included: (1) site grading completed in January, (2) equalization wetwell completed in May, (3) secondary concrete containment structures completed in September, (4)

#### **Easy Actions You Can Take Now**

1. Educate yourself and your family about the benefits of recycled water. For more information, please visit: [www.sanjoseca.gov/sbwr](http://www.sanjoseca.gov/sbwr).
2. Learn about ways to conserve water including checking faucets and pipes for leaks, waiting for full loads of laundry or dishes, and watering the lawn before 5 AM instead of midday. For more information, please visit: <http://www.sanjoseca.gov/esd/water-conservation>
3. Learn more about rebates and water saving devices and information, please visit: <http://www.valleywater.org>

process building completed in November, (5) product water storage tank foundation poured in November, and completed most of the underground onsite and offsite pipelines and utilities. Next steps include approval of regulatory permits and an operations and maintenance (O&M) agreement between the City and SCVWD. Facility start-up and commissioning is expected to occur in early 2013.

**EcoCloud™:** SBWR and Sustainable Silicon Valley (SSV), a regional non-profit organization, have been providing ongoing technical support to recycled water customers since 2008. In December 2010, SSV developed and launched a social networking forum called the EcoCloud™ Innovation Network where companies can encourage each other to adopt sustainable practices. Currently, SSV is developing various EcoCloud™ online communication modules to address intersections between industry and environmental protection. Coordinated marketing efforts will help demonstrate consistent recycled water messaging locally and regionally. To learn more, please visit: <http://www.sustainablesv.org/ecocloud>

**Strategic Planning:** The SBWR Strategic Planning process, currently underway, will develop recommendations and options for SBWR's mandates, mission, service level, cost effectiveness, and funding, with the engagement of several key stakeholders including staff from Water Pollution Control Plant Tributary Agencies and SCVWD. This effort will include an assessment of existing infrastructure to meet current and future recycled water demands and will identify capital improvements to enhance system reliability and maintain or improve water quality. The Plan will also provide recommendations on SBWR financing and rates, including options to bring SBWR to full cost recovery and identify future expansion projects that yield the most favorable return on investment (including those most likely to attract federal and state funding). In August 2011, USBR awarded the City approximately \$1 million to conduct a feasibility study for improvements and expansions to the SBWR system which will fund about half of this effort. The planning effort is expected to be completed in September 2013.

**System Pipeline Expansions:** SBWR funds system expansions through grants, developer funds, and revenue from other agencies specifically designated for this purpose, such as from SCVWD. In 2010, USBR awarded the City \$6.46 million in funds through ARRA to reimburse the City for more than 40% of the cost of a \$15 million pipeline expansion program that will add ten miles of pipeline to downtown San José, south San José, and industrial areas in north Santa Clara. This project will provide up to an additional two million gallons of water per day. Project construction began January 2010 and will continue into 2012. Staff pursued the following grants in 2010 and 2011 for infrastructure to extend recycled water use throughout the SBWR service area:

- *Proposition 84 Bay Area Integrated Regional Water Management* – In August 2011, DWR awarded SBWR a \$5.5 million grant to fund construction of potable back-up systems for two facilities, including the AWT facility, being constructed in partnership with the SCVWD and the Norman B. Mineta San José International Airport Terminal. San José's local share is \$3 million. DWR and SBWR are expected to enter into a grant agreement in spring 2012.



*Expansion of Recycled Water Network*

- *WaterSmart Grant* – In September 2011, SBWR entered into an agreement with USBR for a \$2.0 million WaterSMART grant to fund facility improvements at SBWR’s Transmission Pump Station to augment pumping capacity or storage to deliver an additional 2,000 acre-feet-per-year of recycled water and distribution pipeline extensions to deliver an additional 500 acre-feet-per-year of recycled water. The City’s local share is \$1.3 million; total cost of the project is estimated at \$3.3 million.

### **Strategic Direction**

In 2011, SBWR staff focused on increasing system reliability, and the development and expansion of recycled water use through partnerships with public, private, and non-profit entities in Silicon Valley. In 2012, SBWR will continue these system reliability and enhancement efforts, and our partnership with SCVWD to construct the AWT center that will significantly improve recycled water quality to facilitate greater water use. SBWR staff will complete its strategic planning process which will define SBWR’s short-term and long-term future as well as lay the foundation for SBWR Strategic Planning to begin in 2012.

### **Climate Change**

Using PG&E's conversion factor (a more accurate measure than previously used for energy), the greenhouse gas (GHG) emission impact of water usage in 2011 was estimated to be 1,000,757 metric tons (MT) of CO<sub>2</sub> equivalents. This is lower than the 2010 estimate, which was recalculated to be 1,019,951 MT of CO<sub>2</sub> equivalents. This decrease is partially due to changes in population and the job sector in San José.

The recycled water system in San José currently emits approximately 1,815 MT of CO<sub>2</sub> equivalents to deliver 9,067 acre feet of water. Again using PG&E's conversion factor, the greenhouse gas emission impact is lower than 2010 estimate (which has been recalculated to 1,881 MT of CO<sub>2</sub> equivalents).

#### **Celebrating Over 10 Years of Recycled Water Use:**

On March 1, 2011, San José State University (SJSU) held a “Recycled Water Expansion Celebration & Discussion Forum” at the Martin Luther King, Jr. Main Library. The event celebrated the connection of the library to the recycled water line and included a panel discussion about the importance of sustainable water use, the value of recycled water, and the University’s current and future plans to expand recycled water use throughout the campus. While recycled water has been used at SJSU for more than ten years for irrigation and cooling, in February 2011 the library began using recycled water for flushing toilets and urinals. The indoor water project was part of the City’s \$15 million expansion of SBWR co-funded by the University and USBR through ARRA grants.

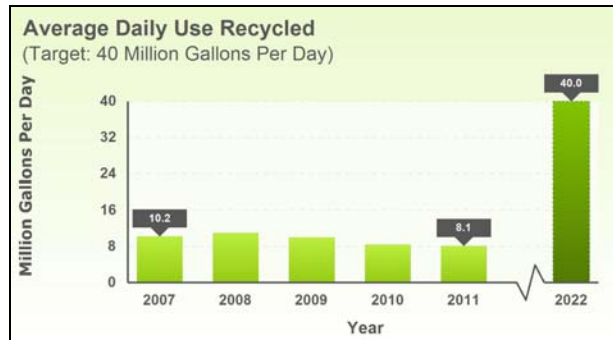
### **Work Plan**

Strategic Focus	Proposed Strategy	2011 Work Plan	2012 Work Plan
<b>Lead by Example</b>			
Determine the most effective and efficient options to expand uses of Recycled Water.	Identify options as part of the Strategic Planning process.	Incorporate industry suggestions from 2010 outreach into revised ordinance and re-propose to Transportation and Environment Committee.  <b>Status:</b> Deferred.	Commence Strategic Planning effort.

Strategic Focus	Proposed Strategy	2011 Work Plan	2012 Work Plan
		Requiring prescriptive expansion has been replaced with incentive-based programs promoting recycled water use and developer funded expansion efforts.	
<b>Financing Mechanisms</b>			
Determine funding options for recycled water infrastructure, operations and maintenance, and expansion.	Identify options as part of the Strategic Planning process.	<p>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.</p> <p>Support adoption of new sanitary sewer treatment plant connection fee.</p> <p><b>Status:</b> SBWR obtained ~\$5.6M in state and federal grant funding supporting program expansion.</p>	Continue to work with USBR to maximize funding opportunities in support of increasing SBWR return on investment and system reliability.
<b>Strategic Partnerships</b>			
Develop the SCVWD and other agency partnerships to further the objectives of SBWR.	Take advantage of strategic partnering opportunities to leverage SBWR resources effectively.	<p>Implement agreement with the SCVWD for operation and maintenance of the AWT.</p> <p><b>Status:</b> Draft language developed for O&amp;M agreement. Adoption of the agreement is expected in spring 2012.</p>	<p>Approval of regulatory permits and O&amp;M agreement between the City and SCVWD.</p> <p>Engage Tributary agencies, the SCVWD, and other potential partners in the Strategic Planning effort.</p>
Support the State's goals for additional use of recycled water which leverage state and regional resources to meeting SBWR objectives.	Participate in regional and State recycled water efforts and forums which further SBWR objectives.	<p>Continue to support and develop efficient and consistent regulated uses of recycled water in the region and State.</p> <p><b>Status:</b> In progress. State activities have been minimal in 2011.</p>	Continue to support and develop efficient and consistent regulated uses of recycled water in the region and State, engage in regulatory efforts restricting recycled water use to protect groundwater.

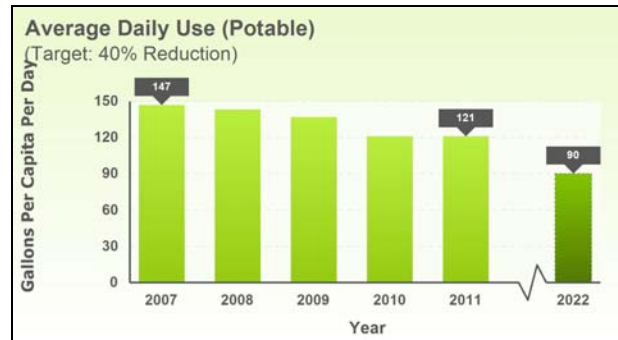
Strategic Focus	Proposed Strategy	2011 Work Plan	2012 Work Plan
<b>Communications and Engagement</b>			
Create cost effective public and private partnerships to facilitate marketing recycling water.	Partner with SSV to launch the EcoCloud™, a virtual industrial ecosystem where industry, government and educational institutions can work together to become more sustainable.	Assist with EcoCloud™ website development, workshops, and other project to facilitate customer connection.  <b>Status:</b> SBWR contributed to components that were incorporated into EcoCloud website.	<i>Not applicable.</i>
Effectively engage potential customers and other stakeholders on the benefits of recycled water.	Increase Recycled Water customers and partners.	Collaborate with non-profit, academic and private sector partners to facilitate the use of recycled water. Implement web-based social networking tools to enhance marketing by creating a community of industrial customers.  <b>Status:</b> Conducted 3 training workshops.	Continue to effectively collaborate with non-profit, academic, and private sector partners to increase the use of recycled water for customers along existing SBWR pipelines.

## Performance Metrics



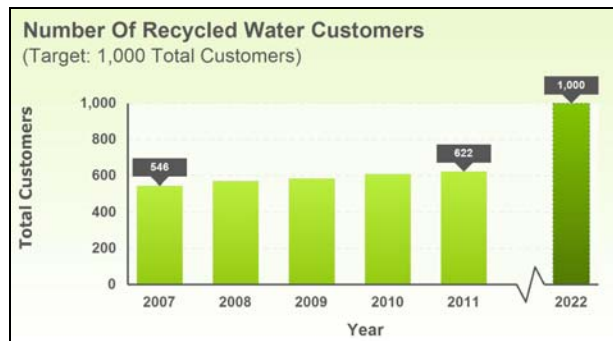
### 2010: 8.4 million gallons per day

The 2011's reduction in recycled water use is attributed to cooler temperatures and average rainfall, the current economic downturn, and subsequent reductions in energy use.



### 2010: 121 gallons per capita per day (GPCD)

2011 GPCD is based on the past 12 consecutive months of data that was currently available.



### 2010: 608 customers



## 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

**Adoption of the Envision San José 2040 General Plan (November 1, 2011):** After a four year process, the San José City Council adopted the General Plan Update on November 1, 2011. The development of the Envision San José 2040 General Plan was achieved through a successful City led process based on significant involvement of community members, property owners and other interested stakeholders.<sup>7</sup> The Plan's policies emphasize: Job Growth, Fiscal Strength, Environmental Leadership, Transit Use and Development of Urban Villages as the top five community priorities.

The Envision Plan prioritizes development of up to 470,000 new jobs and also includes up to 120,000 new housing units, for 400,000 new residents through 2040, supporting a future residential population of approximately 1.3 million. San José currently has a 0.8 Jobs-to-Employed Resident (J/ER) ratio, a fundamental reason for residents' lengthy job commutes out of the city, resulting in higher levels of Vehicle Miles Traveled (VMT) per resident. The Envision Plan has a priority goal of increasing the J/ER ratio to 1.3 and reduce VMT by 40% by 2040.

Key features of the Envision Plan are to:

- Identify "Urban Villages" to support the City's transit system investments, and the invigoration of suburban locations by creating vibrant, walkable, bicycle-friendly, mixed-use areas at strategic locations throughout the City
- Target substantial job and housing growth capacity at transit locations, including the Downtown area, existing light rail stations, future bus rapid transit stations, and the future Berryessa and Alum Rock Bay Area Rapid Transit (BART) stations
- Locate significant job growth capacity on 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 to promote San José as a regional job center
- Protect existing neighborhoods and provide enhanced retail and service opportunities
- Provide near term residential capacity for up to 85,000 dwelling units in the first phase of the Envision Plan and additional housing capacity of up to 120,000 units by 2040
- Incorporate the City's Greenhouse Gas (GHG) Reduction Strategy
- Provide for regular review of the Plan's implementation and successes



*Village Concept Drawings*

Additionally, Council adopted the Land Use/Transportation Diagram as recommended by staff, the General Plan Task Force, and the Planning Commission. Decisions on placement and intensity of land uses directly affect energy use, along with the consequent production of GHG emissions, due to the strong correlation between where people live and work, as well as transportation needs. Targeting new development in key growth area locations and at the intensities identified in the General Plan will allow the City to accommodate projected population growth in multi-story green buildings, generating decreased levels of VMT and decreases in GHG per capita.

**Initial Envision Implementation Actions:** On December 13, 2011, an initial milestone in implementation of the Envision San José 2040 General Plan was achieved with the Council adoption of an Ordinance to revise the Zoning Code to align better with the Envision General Plan, with key changes including allowing higher density development in a R-M Multi-family Residential district, allowing installation of electric vehicle charging stations, increasing flexibility to install tankless water heaters for single-family homes, and allowing neighborhood agriculture as a home occupation. The latter item was funded in part with a grant from the Health Trust.

As another key implementation action, staff is preparing Urban Village plans, utilizing grant funding. Staff is working with CommUniverCity and the community to complete the plans for the Five Wounds area.

Staff is developing a Council Policy to guide analyses and determinations regarding the conformance of proposed development projects with the City's adopted GHG Reduction Strategy. This is expected to be ready for Council consideration in 2012 and could identify projects for which additional analysis of GHG emissions would be needed based upon their scale or emissions characteristics, and identify projects for which further analysis is not necessary based upon their scale and/or consistency with the adopted Envision General Plan.

The Envision Plan identifies Measurable Standards for Sustainable Development as set forth in the Plan strategies and Implementation policies. The first comprehensive evaluation of those Standards as part of the General Plan Annual Review process is scheduled in Spring 2013. The Envision Plan sets a baseline for future assessment of the City's progress toward sustainability. During 2012, a set of key Standards will be developed for the measurement of the City's implementation of the Envision General Plan, such as number of areas of San José which are "complete communities," square footage of new "green" buildings constructed, etc.

## Legislation

Staff will continue to monitor and participate in the review process of State and Federal legislation that supports the implementation of San José's sustainable General Plan. Such legislation includes:

- Support legislation that would result in useful reform to the California Environmental Quality



Willow Glen

Act (CEQA) that supports transit friendly development and other City goals.

- Support legislation at the State and Federal levels that: (1) facilitates private and/or public sector investment in housing affordable to households of extremely-low, very low, low- and moderate-income; (2) provides for the greatest local autonomy in the administration of State and Federal housing programs; and (3) furthers the City's objective of conserving and rehabilitating the existing housing stock
- Promote legislation to establish Countywide or Statewide agricultural preservation programs, including identifying sources of funding necessary for implementation of such programs

## Strategic Direction

Land use and transportation are inextricably linked, as land use patterns create specific travel needs. Compact, mixed-use development reduces travel distances, encourages transit ridership and active transportation modes that contribute to a healthy community and reduce GHG emissions. The adjacency of most identified Growth Areas and transit facilities also exhibits the close ties between land use and transportation. Unlike the San José 2020 General Plan, which provided considerable flexibility for residential development throughout the City, a key strategy of the Envision San José 2040 General Plan is to focus almost all residential growth to identified growth areas and preclude large scale residential development from occurring on other sites that have not been allocated new growth capacity. As a result, San José's future growth will be focused in Urban Villages and other urban centers around public transportation centers to leverage the benefit of past infrastructure investment, and to accommodate most new development in multi-story urban forms utilizing green building construction techniques with opportunities for alternative energy solutions.

## Climate Change

The GHG Reduction Strategy, developed in tandem with, and contained within the General Plan, is a road map to reduce GHG emissions, including those related to transportation, using targeted policies and a land use plan that, together, support a more compact urban form and greater use of walking, mass transit or bicycling as a means of travel between home, work, school, shopping and other services. As described in the California Air Pollution Controls Officers Association (CAPCOA) resource document, *Quantifying Greenhouse Gas Mitigation Measures*, a city's general plan with efficient location of urban land uses relative to transit is its single greatest tool to reduce GHG emission levels related climate change.



San Pedro Square Farmers Market

While GHG emission levels are very difficult to measure directly, achievement of many Green Vision goals and related Envision General Plan policies are expected to have a positive effect in decreasing emission levels over time due to modified travel and energy use patterns. Specific measures will help the City monitor its performance on the implementation of the Envision San José 2040 General Plan, such as the amount of new green building construction, transit ridership,

miles of new trails and bike lanes, Urban Village Plans prepared, and proportion of new homes and businesses approved and constructed within the identified Growth Areas and their proximity to public transit.

## Work Plan

Strategic Focus	Proposed Strategy	2011 Work Plan	2012 Work Plan
<b>Lead by Example</b>			
General Plan Update.	Complete Envision San José 2040 General Plan.	Complete environmental review (EIR) and adopt General Plan Update, including Goal #7 Sustainability Measures.  <b>Status:</b> Complete.	Develop a Council Implementation Policy for the Greenhouse Gas Reduction Strategy; prepare Urban Village Plans and revise the Zoning Ordinance to facilitate sustainable urban development in identified focused Growth Areas.
<b>Advocating Policies</b>			
Monitor and advocate for legislation that enables the implementation of the General Plan.	Review proposed legislation and implementation of existing laws related to sustainable land use planning.	On-going review and analysis as needed.  <b>Status:</b> Ongoing.	On-going review and analysis as needed.
<b>Financing Mechanisms</b>			
Leverage grants.	Seek outside funding sources for sustainability planning activity and implementation of the General Plan.	Leveraged General Fund support. Applied for four sustainable land use planning grants.  <b>Status:</b> Received grants from VTA, MTC and Health Trust for Urban Village planning/rezoning.	Continue to apply for planning grants in order to support development of Urban Village Plans and other General Plan implementation actions.
<b>Strategic Partnerships</b>			
Strengthen advocacy; broaden partnerships.	Increase role as an advocate in State / Regional planning and grow partnerships with non-profits.	Participated in MTC, ABAG, and BAAQMD regional planning initiatives.  <b>Status:</b> Partnered with CommUniverCity and the Health Trust to plan healthy sustainable communities.	Continue to participate in MTC, ABAG, BAAQMD regional planning initiatives (e.g., Sustainable Communities Strategy).

Strategic Focus	Proposed Strategy	2011 Work Plan	2012 Work Plan
<b>Communications and Engagement</b>			
Publicize Envision San José 2040 General Plan policies.	Focused civic engagement with identified stakeholders and community organizations, First Horizon village area residents.	Completed award-winning Phase II Outreach activities, engaging approximately 5,000 community members.  <b>Status:</b> Directly engaged 5,000+ community members, hosted 50+ citywide stakeholder group presentations, sent 9,000+ letters to identified affected property owners, and sent information mailer to 240,000 residential households.	Engage the community in Envision General Plan Implementation elements, such as Zoning Ordinance amendments and Urban Village Plans through community meetings, website information, and other modes; engage Planning Commission in creation of Urban Village zoning districts; and engage developers to catalyze new development in focus areas.

### **Performance Metrics**

As noted above, the Envision San José 2040 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. Land use related performance metrics could include measures such as the percentage of City residents living within a “complete community” as defined by a certain walking distance of transit and various services. This metric is the starting point for determining reductions in VMT and GHG. Actual VMT on a year-to-year basis is difficult to measure, but associated indicators such as changes in transit ridership, census journey-to-work data, and other information can provide a measure of progress. Periodic modeling to assess the effects of land use changes and development over a four year timeframe of the Major Review of the General Plan could provide benchmarks in the reduction of GHG emissions. The first Annual Review of the new General Plan is scheduled for 2013. Over the next year appropriate key standards will be developed to determine the City’s progress in implementing the General Plan and its sustainability goals.



## 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.*



*Airport shuttle bus fueling at Airport's CNG station*

### Achievements & Successes

**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 department's program service delivery requirements. In 2011, the fleet size reduction was 5% and 954 of the City's vehicle fleet, or 40%, run on some form of alternative fuel: compressed natural gas (CNG), B20 biodiesel blend, electric, hybrid gas/electric, liquid propane gas (LPG), and bi-fuel (unleaded gas and CNG).

**Vehicle Acquisitions** – In 2011, vehicle replacement for the non-public safety fleet in the General Fund was eliminated in the budget process; as a result vehicle acquisitions were limited to special fund and Public Safety vehicles. The Departments of Public Works and Police are jointly developing an updated procurement specification for the new generation of patrol vehicles for public safety. Patrol vehicles equate to 19% of our City fleet. The Ford Crown Victoria, which dominated this market for several years, has been discontinued as of the 2011 model year and is no longer in production. Two of the three manufacturers of patrol vehicles have introduced completely new platforms for 2012, the Ford Interceptor and the Chevrolet Caprice. Chrysler, the third manufacturer of patrol vehicles, has reintroduced its Charger platform for its current patrol application. Unfortunately, the foreseeable future has no market indicator of an alternative fueled patrol vehicle. This creates a gap in the City's ability to obtain its Green Vision goal regardless of available funding. However, the latest patrol cars do offer some options with advances in fuel economy and emission reductions.

**Car Share Pilot** – In collaboration with San José State University, the City posted a Request for Proposals (RFP) for a car share program in July 2011. Staff anticipates program launch by the second quarter of 2012. This pilot program will start in downtown San José and help meet both public and private needs for short term vehicle usage. As part of the RFP, the City offered to retire some vehicles in its fleet and utilize carshare services in their place. At its essence, car sharing is a "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 join an organization that maintains a fleet of vehicles distributed in key locations over a geographic area. Car sharing is self-service and a participant typically pays a one-time

registration fee and in some cases an annual membership fee. Participants also pay an hourly (or smaller time increment) usage fee and in some cases a per mile fee to use the vehicles. These fees cover cost components such as gas, insurance, maintenance, and parking at the vehicle's home site. Car sharing differs from car rental services in that car share vehicles are typically used for short-term, local trips.

*Fleet Pilot Program* – In August 2011, the City released a RFP for a private contractor to provide quality fleet services for vehicles that are used by various City departments including the Parks, Recreation and Neighborhood Services Department. The purpose of the pilot program is to collect data and review various service delivery options to ensure the most cost-effective service delivery model for the City's fleet operations program. Negotiations are in process with the vendors selected from the RFP process, with contracts expected to be in place in the Spring of 2012.

### **Grants and Strategic Partnerships:**

*Electronic Transportation Development Center* – In 2010 the City entered into several strategic partnerships focused on developing electric vehicle (EV) 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 EV manufacturing, in concert with companies who specialize in expanding existing CNG infrastructure.

*Bay Area EV Taxi Corridor Demonstration Project* – San José, in partnership with Better Place, Inc., and the San Francisco Metropolitan Transportation Authority, secured a \$6 million grant from the Metropolitan Transportation Commission (MTC) Climate Initiatives Program for the Electric Vehicle Taxi Corridor Demonstration Project. As part of the project, San José will develop up to two battery-switch stations and deploy an all electric, battery-switchable taxi fleet. The Demonstration Project is intended to showcase an innovative, scalable and replicable emissions reduction strategy utilizing electric vehicle battery switch technology. Currently, staff is working on the partnership agreement terms with Better Place and identifying sites for the swap stations.

*EV Corridor Coalition partnership* – 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 EV charging infrastructure and also provided coordination of grant submittals within the regional framework. One such grant proposal is the Bay Area EV Corridor Project, which was awarded approximately \$1.5 million by the California Energy Commission through its Alternative and Renewable Fuel & Vehicle Technology Program. The program will fund the purchase and installation of approximately 206 electric vehicle chargers in the Greater Bay Area, including 23 in San José. Eighteen of the City's chargers will be installed downtown and five at the San José Environmental Innovation Center.

*ChargePoint America* – The City is also a beneficiary of the ChargePoint America program, a program sponsored by Coulomb Technologies to provide EV charging infrastructure to nine selected regions in the nation. The program was made possible by the American Recovery and

Reinvestment Act (ARRA) through the Transportation Electrification Initiative administered by the U.S. Department of Energy (DOE). Its objective is to accelerate the development and production of electric vehicles to substantially reduce petroleum consumption, reduce greenhouse gas (GHG) production, and create jobs. In California, the California Energy Commission (CEC) augmented the program by providing funds to help cover the cost of installation. The program will enable the City of San José to install 26 EV charging stations primarily downtown in City owned parking garages.

*Bay Area Electric Vehicle Infrastructure Readiness Pilot Project* – This collaborative grant, with the Association of Bay Area Governments (ABAG) and the Bay Area Air Quality Management District (BAAQMD), provides funding to streamline development processes in order to install more EV chargers throughout the region. For example, the grant will help develop EV-ready building codes and assist PW staff in developing EV installation 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.



*Green Vision Clean Energy Showcase Demonstration of a Solar Powered, Turnkey Electric Charging Station – Collaboration of Breathe California, SunPods, and Aaraya*

*Local Government EV Fleet Project* – This MTC Climate Initiative Grant will provide \$2.8 million to obtain EV fleet vehicles and chargers for 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. A portion of this grant will fund the purchase of three electric vehicle sedans and three EV chargers for the San José fleet. The program is currently tracking manufacturers and waiting to buy vehicles that meet the “Buy America” standards required by the Federal Government.

**Diesel Particulate Filters:** California Air Resources Board (CARB) regulations mandate public agencies and utility vehicle owners reduce diesel particulate matter (PM) emissions through the application of Best Available Control Technology (BACT) on (non-public safety) heavy duty on-road diesel vehicles. Emission reductions are 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.

Currently, 85% of the heavy duty on-road diesel fleet (non-public safety) have been retrofitted with DPFs which reduce diesel PM emissions by 85%. The current retrofit program will be completed by July 2012. In addition to the retrofits all 2007 and newer heavy duty diesel trucks purchased are equipped with this new clean technology. Since 2007 the City has procured 39 new trucks which contain this new clean technology and the City has also retired from the fleet approximately 50 older and far less clean vehicles.

## Legislation

According to existing legislation Assembly Bill (AB) 32 - California Global Warming Solutions Act and AB 1493 - Vehicular Emissions, GHG emissions must be 25 % below 2003 levels by 2012. Annual vehicle emissions to date have been reduced by 32% since the 2003 baseline (23,263 CO<sub>2</sub> tons) and the City fleet is in alignment with these GHG reduction targets.

**Off-Road Diesel Engine Emission Standards:** 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. In 2014, gradual requirements for fleets to clean up their fleet will begin by getting rid of older engines, using newer engines, and installing exhaust retrofits. The overall purpose of the regulation is to reduce emissions of oxides of nitrogen (NO<sub>x</sub>) and PM from off-road diesel vehicles. The City has been proactive when opportunities arise by replacing equipment under this regulation with newer, cleaner technology.

## Strategic Direction

In the short term, budget and technology constraints will continue to slow the City's progress toward replacing all city fleet vehicles with alternative fuel vehicles (AFV). Where costs are comparable and where replacement funds are available, AFVs will continue to be the choice. It is, however, important to note that the costs of some AFVs make them cost prohibitive as replacements. Additionally, there are several areas where AFVs are not an available option yet, for example in police patrol vehicles where no commercially acceptable AFVs are available. With these limitations, the likely realistic percentage of municipal vehicles that can achieve the AFV designation at this time is approximately 75%. The City is pursuing all options as well as other efforts outside of procuring AFVs, such as developing a car share program and upgrading EV infrastructure that supports more AFVs coming to market. These initiatives could, in the end, have a greater impact overall.



**Electric Vehicle Display at Bright Green Day:** On April 29, 2011, nearly 1,000 people attended Bright Green Day, held at the City Hall Plaza. The event showcased several alternative fuel vehicles, including the new Nissan Leaf, the new Chevy Volt, a compressed natural gas passenger van from General Motors, the new all-electric Toyota Prius, and two all-electric Vectrix motorcycles from Wattco Equipment, Inc. The event was funded by the Department of Energy/Solar America Communities Program and generous donations from Nissan, SunPower, World Centric, General Motors, Pacific Gas & Electric, SolarCity, Santa Clara Valley Water District, Silicon Valley Community Newspapers, and others.

## Climate Change

San José continues to focus on right-sizing the fleet by eliminating older vehicles and down-sizing the size or type along with choosing the alternative fuel version whenever possible and practicable. This approach will achieve the maximum GHG emission reductions without impairing City services. According to data calculated using EPA metrics for fuel, since 2003 GHG emissions have been reduced by 7,363 metric tons of CO<sub>2</sub> equivalents, or by 32%.



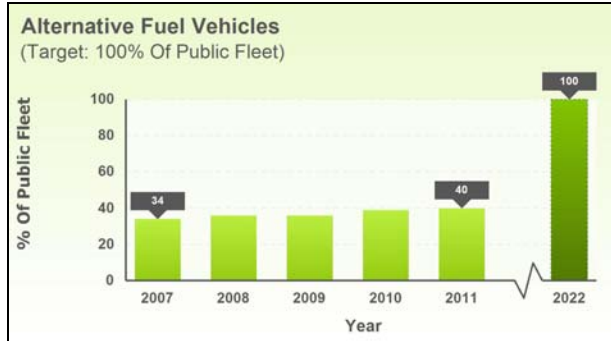
## Work Plan

Strategic Focus	Proposed Strategy	2011 Work Plan	2012 Work Plan
<b>Lead by Example</b>			
Reduce fuel consumption and GHG emissions.	Use higher fuel efficiency vehicles in public safety fleet.	<p>Complete the evaluation/pilot process of purpose built patrol vehicles. Develop an updated procurement specification for the new vehicle standard.</p> <p><b>Status:</b> Continue procurement of actual test vehicles; deploy to field operations as part of evaluation.</p>	Complete one cycle of procurement of new patrol vehicles during calendar year 2012.
<b>Financing Mechanisms</b>			
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>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> <p><b>Status:</b> Initial grant funded work complete; full compliance by July 2012.</p>	Complete on-road diesel retrofit and retire non-compliant vehicles. Continue to seek opportunities for Off-road diesel equipment retirements and replacements including grant funding if available.
<b>Strategic Partnerships</b>			
Expand alternative fuel infrastructure.	Collaborate with other jurisdictions for regional compatibility.	<p>Implement MTC and CEC Grant projects.</p> <p>Collaborate with regional partners in future grant solicitations.</p> <p>Develop a local strategy to deploy a Car Share 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> <p><b>Status:</b> Working on agreement terms for battery swap stations and</p>	<p>Move forward with the development of two battery switch stations and 52 EV charging stations.</p> <p>Launch car share program in late Spring-early Summer.</p>

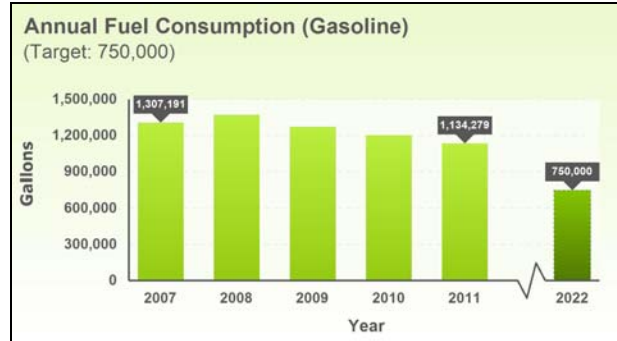


Strategic Focus	Proposed Strategy	2011 Work Plan	2012 Work Plan
		starting to install EV chargers. RFP issued to select a car share provider.	

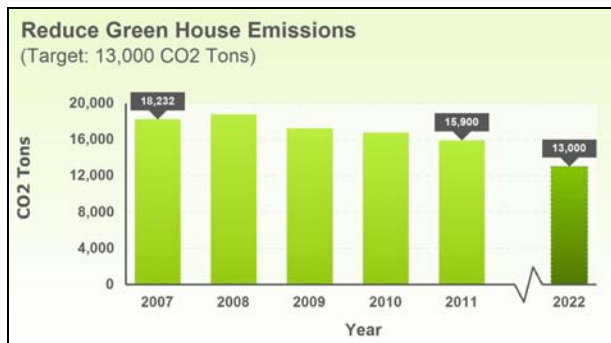
### Performance Metrics



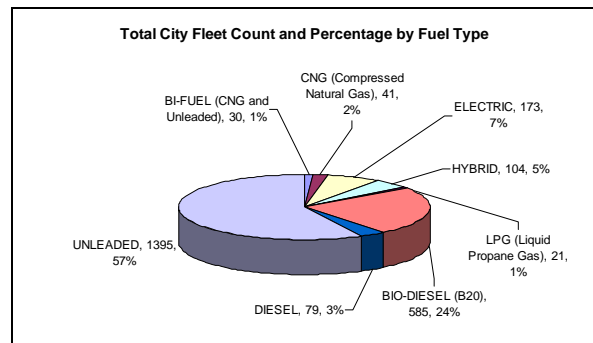
**2010: 39% of the fleet ran on alternative fuels**  
Previous figures were updated to reflect more accurate fuel and fleet calculations.



**2010: 1,201,766 gallons**



**2010: 16,743 CO2 Tons**  
This 2011 calculation represents a 32% reduction when compared to 2003 baseline (23,263 CO<sub>2</sub> Tons).



In 2011, the City's vehicle fleet was reduced by 5% according to the City's Green Fleet Policy. As a result, 954 vehicles or 40% of the fleet run on alternative fuels.

## Plant 100,000 New Trees & Replace 100% of Streetlights with Smart, Energy-Efficient 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, energy-efficient streetlights will improve the quality of light on the City's streets and reduce energy consumption.*



Roosevelt Neighborhood Tree Planting

### Achievements & Successes

#### Community Forest Program:

The City of San José has a strategic partnership with Our City Forest (OCF), San José's award-winning community forestry non-profit. OCF has been instrumental in leveraging non-City funds to enable San José residents to enjoy a range of services including free trees, technical support, volunteer opportunities and educational workshops. Together we have achieved the following:

*Our City Forest Community Nursery & Training Center* – OCF's three-year effort to build a community nursery culminated with a grand opening event in November 2011. The nursery, which is located north of Hedding Street within Guadalupe Gardens, has 5,000 trees under cultivation. The Center was created by Our City Forest to: 1) create a more economically viable approach for providing quality trees for residents, parks, government facilities and schools, 2) provide a one-stop community resource for the planting and tree care education essential for high survival rates, 3) make trees and related services available for yards in order to increase plantings, and 4) provide a broader range of natives and other suitable species not typically available locally. OCF pieced together \$500,000 in State and Federal funding to cover fencing, utilities, irrigation lines, a greenhouse, bare root stock, and initial operating expenses. Construction of the facility also involved the efforts of more than 1,000 volunteers. The City's Parks, Recreation, and Neighborhood Services (PRNS) and Transportation (DOT) departments assisted with planning, permitting, and site preparation. Sustaining a viable and low-cost nursery operation is a high priority in order to double the annual number of 15-gallon trees planted by 2013.

*Plantings & Community Engagement* – Since 1994, OCF has been a unique resource to neighborhoods, parks, schools, and other agencies to obtain trees, supplies and technical assistance. In 2011, OCF organized 171 tree planting events, recruited 5,115 community volunteers, and funded the planting of 1,700 trees. San José parks benefitted from 386 of those trees plus 154 shrubs. OCF



obtained State grants to complete planting projects in each of San José's 28 residential zip codes. Another 10,663 trees received basic tree care, pruning, and stewardship follow-up – all essential for achieving high tree survival rates. Other City tree planting projects resulted in the addition of another 908 trees, bringing the net number of new trees planted in 2011 to 2,148 (adjusted for the number of trees removed).

*Community Service & Green Jobs Training* – OCF's AmeriCorps team of 35 full-time members contributed 57,450 hours of community service to San José in 2011, with OCF providing 12,000 hours of green job training. Eleven of the 35 members returned to OCF for a second full year of service. Member activities included: community plantings, tree care and cultivation, fleet management, publications, volunteer recruitment, training, and youth education.

*Street Tree Inventory* – Having a complete inventory of the street trees in a city is the foundation on which an effective street tree program can be designed. A tree inventory helps determine the location and size of future street tree plantings. To date, using staff from the City, OCF, and contractors, approximately 60% of the street trees in San José have been inventoried. The cost to complete the inventory is approximately \$400,000. In San José, individual property owners are responsible for the maintenance of the street trees adjacent to their property. But often people do not know how to properly maintain trees and individual tree maintenance can be very expensive. By completing a street tree inventory, the City will be able to design a program with property owners to possibly prune the street trees on a five-year maintenance cycle, address tree emergencies at no additional cost, and establish new trees in vacant planting locations.

*Tree Policy Manual and Recommended Best Practices* – The City of San José developed a Tree Policy Manual to provide guidelines and current recommended Best Management Practices to City staff, residents and others who provide services to the community forest in San José. The manual was compiled through a collaborative effort of the Community Forest Management Team, a multi-departmental team of City staff members from the various departments that have oversight of trees. The manual helps raise awareness about the benefits of trees and the proper techniques for establishing and maintaining a thriving community forest. To learn more, please visit: [www.sanjoseca.gov/tree](http://www.sanjoseca.gov/tree)



**Siemens 2011 Sustainable Community Award:** The City planted 80 trees at Lake Cunningham Park on October 22, 2011 with assistance from Our City Forest, Alliance for Community Trees, Siemens, and nearly 100 volunteers from the community. The tree planting was made possible through the City receiving the 2011 Siemens Sustainable Community Award which included \$20,000 for trees. San José was one of three cities recognized this year, receiving an award in the "large community" category for the City's bold Green Vision strategy. San José received the award in April 2011, at the National Conference on Corporate Community Investment in Philadelphia. Created in 2008 by the U.S. Chamber Business Civic Leadership Center and Siemens Corporation, the Sustainable Community Awards are given to communities in the United States that are taking proactive steps to improve quality of life, be a steward of the environment and increase the ability to sustain a successful community for generations to come. To learn more, please visit: <http://sustainablecommunity.uschamber.com/>

## Streetlight Conversion Program:

In the last four years, the City has demonstrated the viability of integrating two emerging technologies – Light Emitting Diode (LED) streetlights and adaptive control systems – to improve the quality of light on the City’s streets, reduce the City’s energy consumption, cut the City’s operation and maintenance costs, and protect Lick Observatory’s ability to conduct astronomical research. In 2011, the City achieved three major objectives in pursuit of its Green Vision streetlight goal:

*Public Streetlight Design Guide* – In February 2011, the City Council adopted San José’s Public Streetlight Design Guide which sets forth guidelines for replacing existing and installing new streetlights with white light source for public roadways and adjusting lighting levels commensurate with roadway and pedestrian activity levels. The new design guide will allow the City to:

- Reduce streetlight energy costs by as much as 60%
- Improve lighting quality, visibility and street safety
- Extend maintenance cycle for bulb replacement from 3 to 10-plus years
- Provide real-time communication on streetlight energy outages, including those caused by vandalism
- Eliminate the use of hazardous materials contained in sodium vapor lights
- Preserve the night sky in late evenings for astronomical research by Lick Observatory

The adaptive lighting guidelines adopted by the City rely on existing roadway lighting design guidelines issued by the Illuminating Engineering Society of North America (IESNA) and the International Commission on Illumination (CIE). San José is the first in the nation to employ IESNA’s design guidelines for this purpose.

*Streetlight Conversions* – In November 2011, the City Council approved a \$2 million agreement with Schröder Lighting Limited Liability Company (LLC) to purchase 2,100 network-controlled dimmable LED streetlights for installation in the City, starting in 2012. This is the City’s fifth “smart” LED streetlight installation and its largest to date. The \$2.9 million project includes the purchase and installation of the equipment and is funded by a combination of federal grants: \$908,000 in Community Development Block Grants (CDBG) and \$2,000,000 in American Recovery and Reinvestment Act (ARRA) funds. The conversions will largely occur on major streets in areas throughout the City. In addition, approximately 1,100 lights are planned to be retrofitted as part of various public and private projects. In total, about 3,500 LED lights are planned for installation within the next few years, representing the conversion of approximately 6% of the City’s streetlights.



**LED lights at the Plant:** The San José/Santa Clara Water Pollution Control Plant (Plant) has installed more than 100 Beta LED streetlights equipped with an Acuity remote monitoring and adaptive control system designed to save an estimated savings of 69,000 kWh/yr. The Plant is the largest energy user among municipal facilities and although the Plant generates approximately two-thirds of its own power, all energy demand savings help the Plant move towards its goal of energy self-sufficiency. Since the Plant is a 24/7 operation that uses its lights every night, savings from the LEDs will add up quickly.



*Tariff Pilot for Networked Dimmable Streetlights* – In September 2011, the California Public Utility Commission (CPUC) approved a Pacific Gas and Electric (PG&E) tariff pilot for “network controlled dimmable streetlights.” The tariff pilot is the first of its kind in the nation and San José was instrumental in negotiating the terms of the pilot with PG&E. Currently, a vast majority of public streetlights in the United States are billed on a non-metered rate. Energy consumption is estimated based on the type and wattage of individual lights and the number of hours in an evening, on average, that are anticipated to be in use. The pilot approved by the CPUC will allow participants to be billed for the actual energy consumption of their streetlights based on data generated by their adaptive control systems. This will enable the City to capture the full value of its streetlight energy efficiency measures, including dimming. The three-year pilot is limited to the first 5 PG&E customers able to meet minimum participation requirements. Those criteria include installing at least 300 network-controlled streetlights by December 2012. Two of the five slots have been reserved for the City of San José and Oakland, which collaborated with the California City-County Street Light Association (CAL-SLA) and PG&E to create the pilot. The 2,100 streetlights the City is installing in 2012 will be included in the pilot. Should the pilot be successful, PG&E has said it will work with the pilot participants and CAL-SLA to develop a permanent dimmable streetlight rate.

### ***Strategic Direction***

Budget challenges continue to make it extremely difficult to make substantial progress on the Green Vision goal to plant 100,000 new trees and replace 100% of all 62,000 City streetlights with smart, energy-efficient lighting. In 2012, staff will continue to seek funding to complete the street tree inventory effort, continue the Downtown Property-Based Improvement District tree maintenance partnership, and other tree planting efforts in collaboration with OCF. A majority of the 2,100 streetlights and control systems will be installed in 2012 and San José will launch the first year of PG&E dimmable streetlight tariff pilot. Staff is also looking other strategic initiatives to pursue in order to accelerate the pace of 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. With the addition of 2,148 net trees planted in 2011, GHG emissions sequestered from these additional trees approximated to 84 metric tons (MT) of CO<sub>2</sub> equivalents using the Environmental Protection Agency’s formula for trees, assuming these trees survive for 10 years. In total 6,617 trees have been planted since 2007, sequestering about 258 MT of CO<sub>2</sub> equivalents.

The 2,100 streetlight conversions currently underway will reduce the City’s annual energy bills by approximately \$100,000 (assuming the lights are dimmed an average of 30% for half the night), energy consumption by approximately 700,000 kWh per year, and GHG emissions by more than 190 MT of CO<sub>2</sub> equivalents. Those estimates do not reflect the additional operational savings achieved by switching to longer-lasting lights.



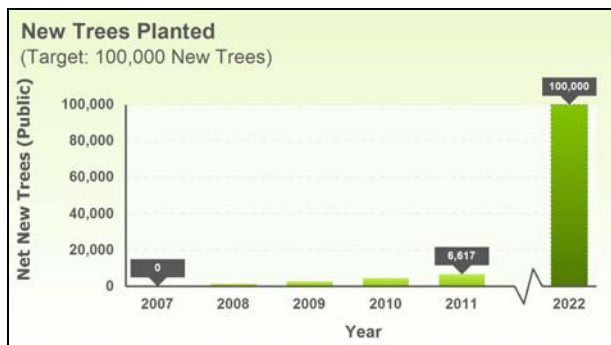
## Work Plan

Strategic Focus	Proposed Strategy	2011 Work Plan	2012 Work Plan
<b>Lead by Example</b>			
Reduce Citywide streetlight energy consumption.	<p>Develop streetlight design guide that will guide the City when it replaces existing lights, installs new LED lights, and dims lights during off-peak hours.</p> <p>Use federal grant funds to convert LPS streetlights to LED with adaptive controls.</p>	<p>Council adoption of Streetlight design guide in winter 2011.</p> <p>Council adoption of interim standards for the use of broad spectrum lights for Outdoor Lighting on Private Developments 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><b>Status:</b> Council adopted design guidelines and outdoor lighting policy.</p> <p>Staff completed RFP solicitation and selected contractor to provide approximately 2,100 network-controlled dimmable LED streetlights.</p>	<p>Install approximately 2,100 network-controlled dimmable LED streetlights.</p> <p>Staff intends to proceed with a comprehensive update to the Policy on Outdoor Lighting on Private Development (City Council Policy #4-3).</p>
<b>Advocating Policies</b>			
Change State regulation to allow cost effective metering of individual lights.	Advocate CPUC regulatory changes.	<p>Resolve method of using data generated by network control for billing purposes with PG&amp;E and CPUC so City receives financial benefit of dimming.</p> <p>Reach resolution with PG&amp;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> <p><b>Status:</b> CPUC approved PG&amp;E tariff pilot; San José will participate in 3 year pilot, including the 2,100 network-controlled dimmable LED streetlights.</p>	Launch first year of PG&E dimmable streetlight tariff pilot.

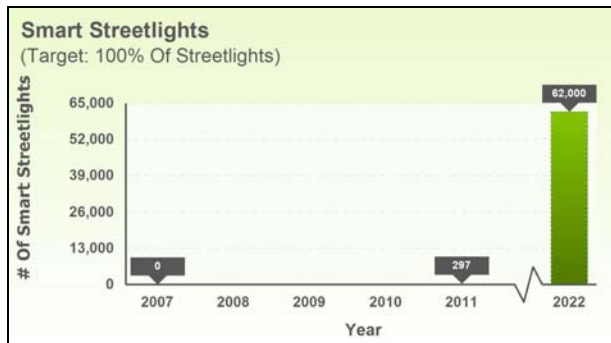
Strategic Focus	Proposed Strategy	2011 Work Plan	2012 Work Plan
<b>Financing Mechanisms</b>			
Increase the care of the community forest and meet the Green Vision planting goal.	Prepare long range plans for an alternative funding mechanism for street tree maintenance and planting.	<i>Did not have a 2011 work plan item.</i>	Continue progress in the street tree inventory project. Research various options for a long-term alternative funding mechanism using data from the street tree inventory data already collected (60% complete).  Reach out to neighborhood groups to explore potential creation of short-term pooled tree maintenance contracts.
Identify funds to upgrade to smart, energy-efficient streetlights.	Require energy-efficient lighting for new development; Identify Federal & City funding sources; Investigate potential for pooled purchase to improve purchase price and financing options.	Continue to seek grant funding for conversions.  Revisit question about financing larger scale conversion.  <b>Status:</b> Obtained \$2.9 million in grant funds to convert 2,100 streetlights.	Continue to seek financing and grant opportunities to fund conversions.
<b>Strategic Partnerships</b>			
Expand, maintain, and track new community forest tree plantings through partnerships with residents and community groups.	Continue to build upon and enhance Our City Forest partnership through collaborative initiatives. Jointly pursue other partnerships that might advance City's tree goals.	Continue progress on finishing the complete street tree inventory effort by seeking grant funding and using existing City resources and OCF.  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.  <b>Status:</b> 60% of inventory complete. OCF opened tree nursery which supports community forest goals. Continued pilot with Downtown Association and tree service provider.	Seek funding to complete street tree inventory.  Continue to work with Our City Forest to leverage resources, including promoting the OCF Community Nursery and successfully relocate OCF offices.  Continue Four-Year Tree Management Plan for street trees in the downtown core in partnership with the Property-Based Improvement District and Downtown Association.

Strategic Focus	Proposed Strategy	2011 Work Plan	2012 Work Plan
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.	Scoped work plan along with other City staff from OED and ESD on urban vegetation as part of LBNL's Cool Cities pilot.  <b>Status:</b> Awaiting response on Urban Greening Grant, which includes 20 native, drought-resistant trees and LBNL heat island research component.	Pursue grant funding in collaboration with LBNL's Cool Cities pilot.
Power existing streetlights with renewable energy.	Investigate all options to cost-effective generate renewable energy to power streetlights.	Develop a strategy to backfill City's streetlight energy requirements with renewable energy.  <b>Status:</b> Currently it is not viable for the City to power streetlights directly with renewable energy. Staff will continue to track this item if viable in the future.	Not applicable.

## Performance Metrics

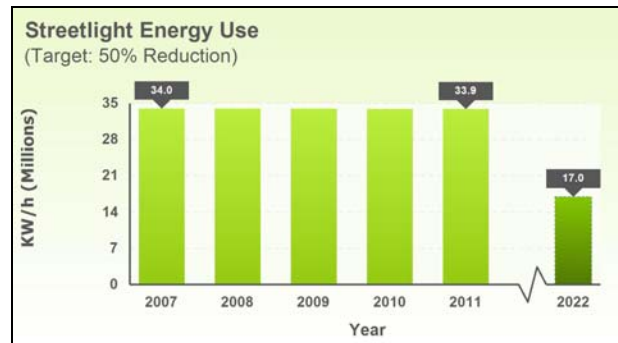


2010: 4,469 trees



2010: 297 smart streetlights

In 2011, staff focused on procurement of 2,100 lights.



2010: 33.9 kWh (millions)

## Create 100 Miles of Interconnected Trails

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



*Guadalupe River Trail between Coleman Ave. and Hedding St.*

### Achievements & Successes

According to the U.S. Census, in the last four years, the percent of San José trips by bike has increased by 25% and currently sits 20% above the national average. A 5.7% increase\* in traffic along the Guadalupe River Trail was documented as part of the annual Trail Count conducted in September 2011 – the fifth consecutive increase in trail traffic.

In 2011, 0.3 miles along Lower Silver Creek Trail (Silverstone Place) and 0.4 miles along Guadalupe River Trail (from Woz Way to Virginia Street) were added to the San José trail network. The Coyote Creek Trail master plan was completed and will guide 3.7 miles of additional trail development from Montague Expressway to Highway 101. In addition, 200 new bike parking spaces and five on-street bike lane projects were completed, adding six miles of bikeways to the network.

### Trail Improvements:

*City Departments Develop Innovative Striping Formula for Trail Safety* – The City's Departments of Parks, Recreation and Neighborhood Services and Public Works have collaborated in the development of an innovative paint specification that provides highly reflective striping along San José's trails. Staff worked with the Police Department's Aerial Unit to document the visual impact of the new striping. Reflective striping will help law enforcement and trail users more easily follow alignments at dusk.

*Latest Guadalupe River Trail Extension Completed* – On April 15, 2011 construction was completed on a half mile extension to the Guadalupe River Trail system. The project was in collaboration with Caltrans, the Army Corp of Engineers and the Santa Clara Valley Water District. The extension begins

#### **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](http://www.sjparks.org/Trails).
2. Encourage your State and Federal representatives to sustain and expand competitive grant funding for trail development that serves both recreation and commuting goals.
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.

\* Data collection occurred along the Guadalupe River Trail at the Coleman Avenue count station.

near the Children’s Discovery Museum at Woz Way and weaves beneath several highway structures. Along the top of the river bank, trail users can stop at two interpretive stations to learn about the Ohlone Indians and the history of San José’s Italian immigrants who settled in the nearby Washington and Greater Gardner neighborhoods.

**Volunteer Spotlight:** In June 2011, the Deloitte Company celebrated their “IMPACT DAY” by helping to clean and plant along the Guadalupe River Trail, and trimming back brush along the Los Alamitos Creek Trail. In November 2011, thirty-two volunteers supported by the Bay Area Ridge Trail organization and private partners: REI and Chipotle, worked in Alum Rock Park to build fencing, cleared the trail, and prepared it for the winter rainy season. Based on feedback from volunteers about the need for additional marketing and outreach on volunteer opportunities, staff created a “Volunteerism” page on the Trail website. In addition, the Adopt-A-Park Coordinator attended various neighborhood meetings, local service group community meetings, and school volunteer fairs to build awareness about volunteer opportunities. To learn more, please visit: [http://www.sjparks.org/Trails/Trail\\_Volunteers\\_Zone.asp](http://www.sjparks.org/Trails/Trail_Volunteers_Zone.asp)

**Special Designations & Awards:** The City of San José received an Award of Merit at the 2011 Trails and Greenways Conference in recognition of the City’s structured approach to biennially inspecting the 51 pedestrian bridges found along city trails.

**Grant Funding:**

*Off-Street Trails* – In 2011, staff submitted applications for \$21 million in trail grant funding. Of these applications, to date, San José has successfully secured approximately \$1 million through three competitive grant programs to advance development of trail systems across the City. California’s Environmental Enhancement and Mitigation Program will contribute \$350,000 towards the design and construction of a one mile paved trail along Coyote Creek, from the Highway 237 Bikeway to Tasman Drive. The Santa Clara Valley Water District is providing \$450,000 towards repair and conversion of a railway trestle over Los Gatos Creek for interconnectivity between the existing Los Gatos Creek Trail and the future Three Creeks Trail system. The grant also supports installation of interim signage and fencing along one mile of property being acquired for the Three Creeks Trail system. California’s Habitat Conservation Fund is providing \$200,000 to be combined with City funds for design and construction of 0.7 miles of paved trail along Thompson Creek, from Tully Road to Quimby Avenue.

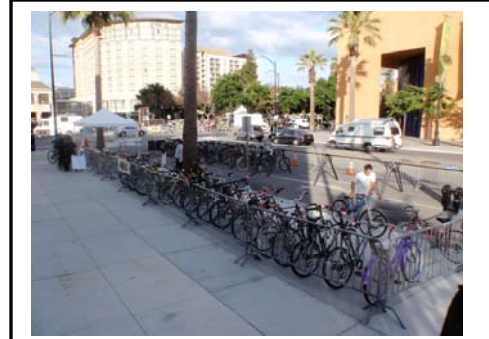
*On-Street Bikeways* – During 2011, over \$4.4 million in funding for on-street bicycle and pedestrian improvements have been obtained. Highlights include:

- \$1.6 million for multi-modal improvements on St. John Street
- \$1.5 million for multi-modal improvements on Park Avenue
- \$489,546 for on-street bikeway improvements, ramps, and bike and pedestrian safety education
- \$129,450 for bikeways on Park Avenue and River Oaks Parkway
- \$75,000 to promote the Public Bike Share system launching downtown in Summer 2012
- \$675,000 for safe pathways to Diridon Caltrain Station

**The Trail Count Survey:** The 2011 Trail Count documented a 5.7% increase in trail usage compared to the 2010 Count. During the fifth annual count, City staff and volunteers counted



and surveyed trail users on September 14 and 28. Stations were set up along the Guadalupe River, Los Gatos Creek and Los Alamitos Creek trails to record the volume of trail users and seek their input on design and operational issues. San José’s Trail Count occurs annually with the support of the Silicon Valley Bicycle Coalition (SVBC), Guadalupe Park Conservancy and many volunteers. Data gathered from the Trail Count helps support competitive grant writing, better design, and advocacy efforts to showcase trails as an important element of the City’s overall transportation system. A full summary report on each count station and the 25-question survey is posted on the Trail Program website:  
(<http://www.sjpark.org/Trails/TrailCount.asp>).



**Bike Parking at Music in the Park Concert Series:** During the thirteen Summer Concert Series events at Plaza de Cesar Chavez, the Valet Bike Parking program parked 2,675 bikes, averaging more than 200 bikes per show. The City of San José partnered with SVBC to provide this free service; facilitating more biking and less driving to downtown events! Please see the SVBC website to learn more about their programs and upcoming events: <http://bikesiliconvalley.org/>

### **Strategic Direction**

Staff will focus on competitive grant writing to supplement City resources allocated to trail and bikeway development. Staff is also studying and testing new approaches to trail development that deliver a project for less money, reduce operational costs, and make use of more environmentally-sustainable practices and materials. Current efforts include:

<b>PRODUCT / PRACTICE</b>	<b>BENEFITS</b>
Removable Aluminum Bollard	Reduces weight from 40 pounds to 20 pounds, reducing injury potential, allowing persons on light duty to perform task. Increased visibility due to use of retro-reflective coating. Graffiti-resistant surfacing reduces maintenance tasks.
On-site Aggregate Base and Asphalt Recycling	Reduces material deliveries to the site, reduces landfill waste and charges. Supports compliance with State mandates for waste reduction.
Warm-Mix Asphalt	Reduces emissions, fumes and odors generated at the plant and on site. Better suited for binding recycled asphalt.
Compost blankets and Compost socks	Substitutes for hydro-seeding for erosion and sediment control. Makes use of recycled materials.
Wood Split Rail Fencing	Less costly than concrete split-rail, easier to repair, and visually consistent with trail environment.
Vehicle Exhaust – Spec 10.1	Update construction specifications to not require that diesel engines be turned off to reduce exhaust production because their cold start is more polluting than prolonged operation.

### **Climate Change**

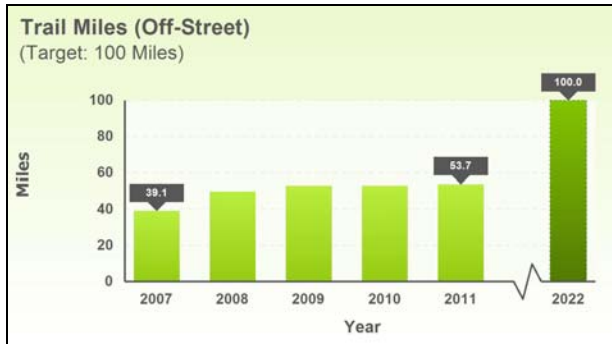
San José continues to encourage people to use either biking or walking as an alternative mode of transit versus conventional fossil fueled vehicles to commute each day. By developing our trails and bikeways, the City will reduce the amount of Greenhouse Gas (GHG) emissions produced

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 for the year 2020. 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 52,335 metric tons of CO<sub>2</sub> equivalents have been reduced from the transportation sector.

### **Work Plan**

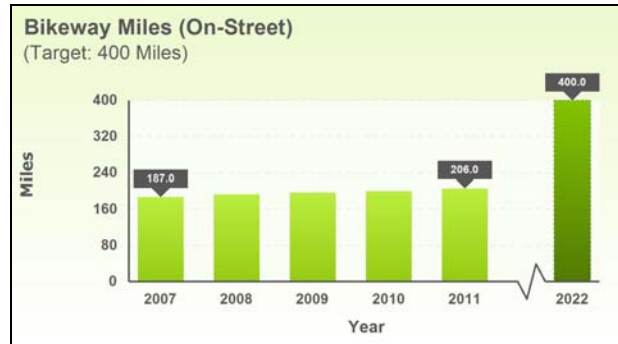
Strategic Focus	Proposed Strategy	2011 Work Plan	2012 Work Plan
<b>Lead by Example</b>			
Expand City's trail network.	Identify priority areas to expand the interconnected trail network.	<i>Did not have a 2011 work plan item.</i>	Start pavement of Lower Guadalupe River Trail (6.4 miles) and Highway 237 Bikeway Trail (0.8 miles)
Expand City's bike network.	Implement "Bike Plan 2020", the council-approved citywide bike plan.	Install 10 miles of bike lanes, bike routes and bike boulevards.  Install 500 public bike parking spaces.  <b>Status:</b> 6 miles of bike lanes and 200 bike parking spaces completed.	Install 10 miles of bike lanes, bike routes and bike boulevards.  Install 500 public bike parking spaces.
<b>Financing Mechanisms</b>			
Fund expansion of trail network.	Work with regional, state, federal and private entities to secure funding and sponsorship.	Continue to seek Council direction to pursue every applicable grant opportunity for trail development.  <b>Status:</b> City Council directed staff to pursue approximately \$21 million in grant funding. So far \$1 million has been secured.	Pursue 5 competitive grants (minimum)
Fund expansion of bikeway network.	Seek grants to help expand and improve bikeway network.	<i>Did not have a 2011 work plan item.</i>	Seek grants that match <i>Bike Plan 2020</i> goals.
<b>Strategic Partnerships</b>			
Expand and maintain trail network through partnerships.	Establish partnerships with non profits and private entities.	Implement Trail Watch Program.  <b>Status:</b> Staff is registering first 5 volunteers who commit to monitor the Guadalupe River Trail.	Partner with the Bay Area Open Space Council to include all San José trails on the Transit & Trails Smart Phone application.

## Performance Metrics



**2010: 53.2 miles**

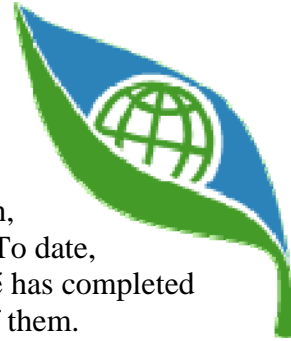
Data points were adjusted to reflect updated trail inventory with a more precise measurement of Coyote Creek Trail system.



**2010: 200 miles**

## 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 on 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:

Actions	Related Initiatives or Policies
<b>Action 1:</b> 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 from Renewable Sources</i> for more information.
<b>Action 2:</b> 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.
<b>Action 4:</b> 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. The City’s plastic bag ban went into effect in January, 2012.
<b>Action 6:</b> 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.	City Council adopted a Zero Waste Strategic Plan in October, 2008. San José has been implementing innovative, recycling focused, integrated waste management programs since the early 1990’s. See the chapter <i>Divert 100% of Waste from Landfills and Convert Waste to Energy</i> for more information.
<b>Action 7:</b> Adopt a policy that mandates a green building rating system standard that applies to all new municipal buildings.	The City’s Green Building Policy for municipal buildings was adopted in 2001 and revised in 2008. Council also adopted a Green Building Ordinance for the private sector in 2009. See the chapter on <i>Build or Retrofit 50 Million Square Feet of Green Buildings</i> for more information.

Actions	Related Initiatives or Policies
<b>Action 8:</b> 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. The San Jose Bike and Pedestrian Program develops infrastructure that facilitates biking and walking in San Jose. The <i>GreenPrint</i> is San Jose's guiding document related to the development of parks and recreational programs. The <i>Envision San Jose 2040 General Plan</i> was adopted by Council in November, 2011 and more fully addresses the various elements of the Green Vision. See the chapter on <i>Adopt a General Plan with Measurable Standards for Sustainable Development</i> for more information.
<b>Action 9:</b> 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 trains and places at-risk youth in environmental internships. 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> .
<b>Action 12:</b> 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. Habitat protection is addressed more fully in the <i>Envision San Jose 2040 General Plan</i> . A new regional stormwater permit has been finalized that requires cities to reduce trash to creeks by 40% by 2014 and 100% by 2022.
<b>Action 14:</b> 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.  The City adopted a Green Fleet Administrative Policy in 2007 designed to reduce greenhouse gas emissions and other air pollutants from the City fleet. Every year, older, more-polluting vehicles are replaced with cleaner and alternative-fuel vehicles.  See the Chapter on <i>Ensure that 100% of public fleet vehicles run on alternative fuels</i> .
<b>Action 18:</b> 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 (BAAQMD) is the Control Authority for setting California standards to minimize air pollution. It monitors air quality and implements the federal and state Clean Air Act requirement. BAAQMD is working to improve air quality through programs such as: the Regional Ozone Plan, CEQA Thresholds of Significance for Toxic Air Contaminants and GHG emissions, low carbon fuel standards, and "Spare the Air Days." The City is regulated by BAAQMD, has created a <b>Community Risk Reduction Plan</b> to minimize the impacts of transit oriented development, and currently has a City Council member on the BAAQMD Board of Directors.
<b>Action 19:</b> 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	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 works closely with the Water District on these initiatives.



Actions	Related Initiatives or Policies
10% by 2015.	
<b>Action 20:</b> 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 to protect the groundwater supply and local reservoirs. San José is working with the Santa Clara Valley Water District to construct an Advanced Water Treatment Facility for recycled water that reduces demand on potable water supplies. The Facility will become operational in Fall, 2012. See Action 12 above regarding the new stormwater permit that better protects local waterways.
<b>Action 21:</b> 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	<p>The City owns and operates a tertiary Water Pollution Control Plant. It does not discharge any untreated municipal wastewater to local receiving waters.</p> <p>Part of the <b>South Bay Action Plan</b> to reduce effluent flows to the bay, the City's <b>South Bay Recycled Water Program</b> delivered an average of 13.1 million gallons of water per day during the dry weather period of 2011 to 630 customers, 16 new ones. Construction of the Advanced Water Treatment Facility began in 2011 as well as a strategic and master planning effort for system maintenance and expansion and to ensure the meeting regulatory and financial commitments.</p> <p>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.</p>

Below are some highlights of what was achieved in 2011 to implement the Accords:

Urban Environmental Accords Action	2011 Achievements and Milestones	Next Steps
<p><i>Energy</i></p> <p>1. Renewable Energy 2. Energy Efficiency 3. Greenhouse Gas Reductions</p>	<p>See chapters on <i>Reduce Energy Use by 50%</i> and <i>Receive 100% of our Electrical Power Renewable Sources</i>. Additionally, the City's Greenhouse Gas reduction activities are discussed in the chapter entitled <i>Climate Change and Greenhouse Gas Emissions</i> and in each goal chapter.</p>	<p>See chapters on <i>Climate Change and Greenhouse Gas Emissions</i>, <i>Reduce Energy Use by 50%</i>, <i>Receive 100% of our Electrical Power Renewable Sources</i>, and the climate change portions of each chapter.</p>
<p><i>Waste Reduction</i></p> <p>4. Zero Waste 5. Ban a Nonrenewable product from the City 6. Recycling Programs</p>	<p>See the <i>Divert 100% of Waste from Landfills and Convert Waste to Energy</i> chapter.</p> <p>The City worked with retailers and residents to ensure that the community was prepared for the ban on single-use plastic bags which occurred on January 1, 2012.</p> <p>Worked with the Cities of Palo Alto and Sunnyvale to discontinue accepting packaging that contains</p>	<p>See the <i>Divert 100% of Waste from Landfills and Convert Waste to Energy</i> chapter.</p> <p>Continue to work towards the ban on accepting expanded foam packaging for roll out in 2013.</p> <p>Revise the City's Environmentally Preferable Procurement Policy to include a ban on the procurement of expanded foam plastic food service ware for use in City</p>

Urban Environmental Accords Action	2011 Achievements and Milestones	Next Steps
	expanded foam plastic with City shipments.	facilities, at City venues, or at City-sponsored events.
<i>Urban Design</i> 7. Municipal Green Building 8. Smart Growth 9. Green Jobs	In 2011, the Green Cadre placed 75 young people in environmental internships that provided them with technical skills in conservation. 2011 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 Development</i> , respectively.	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> .
<i>Urban Nature</i> 10. Parkland Accessibility 11. Urban Forestry 12. Habitat Protection	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 <i>Greenprint</i> . 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). Additionally, it is addressed in the Envision San Jose 2040 General Plan Update.	It is anticipated that park acreage will remain the same through 2012.  See chapter on <i>Plant 100,000 Trees</i> .
<i>Transportation</i> 13. Public Transportation Access 14. Leaded Gasoline Reductions 15. Single Commuter Reductions	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. However, VTA did increase their Bus Rapid Transit services in 2011.  To reduce solo commuting (Action 15), San José was involved in the following efforts in 2011:  <ul style="list-style-type: none"> <li>• Awarded a \$772 million construct contract in 2011 for the BART extension to Berryessa.</li> <li>• Continued to work on the Bus Rapid Transit project.</li> <li>• Completed visual design</li> </ul>	Enhancements to VTA's express bus services including more routes and amenities and more hybrid buses.  Complete 25 miles of new bikeways and install 500 new bike parking spaces  Work will continue on the Bus Rapid Transit Project which is to be completed by the end of 2014.  High Speed Rail: Prop 1A bonds must be sold to secure ARRA money for the Central Valley Section of the line.  In 2012, the Bike/Pedestrian Program plans to complete 15 miles of new on-street bikeways.

Urban Environmental Accords Action	2011 Achievements and Milestones	Next Steps
	<p>guidelines for an arial alignment of the High Speed Rail Project thru San Jose in 2011.</p> <ul style="list-style-type: none"> <li>• During 2011, the Bike/Pedestrian Program completed five new on-street bikeways projects adding 6.3 miles to the bikeway network.</li> <li>• Over the last four years, the percent of trips made by bike in San Jose has increased 125%.</li> <li>• Initiated consultant selection process for the development of the Automated Transit/POD Car Network.</li> <li>• The City issued an RFP to establish a local CarShare Program for residents.</li> <li>• The City Green Team supported San Jose employees in their use of commute alternatives and participated in last year's Great Race for Clean Air with more City employees registering than any other Bay Area employer. The Team also supported Bike to Work Day.</li> </ul>	<p>The City plans to issue a contract for a CarShare Program in summer of 2012.</p> <p>The Green Team will continue to support employees in their use of commute alternatives.</p>
<p><i>Environmental Health</i> 16. Municipal Environmental Procurement 17. Local Organic Foods 18. Air Quality</p>	<p>Implementation of the City's Environmentally Preferable Procurement Policy (EP3) has proceeded with the adoption of green cleaning products in the Fire Department, a green paving project on Monterey Road and considerable deployment of solar PV. Additionally, the City became the first city in the U.S. to earn the e-Stewards Enterprise recognition which recognizes companies, institutions, and governmental bodies that commit to best end-of-life-management of e-waste.</p> <p>LEED certification was achieved for 6 City facilities in part with innovation credits for green procurement and the procurement of green cleaning products including the new Airport Terminal B and North Concourse.</p>	<p>Continue to work with City Departments and the procurement division to incorporate environmental specifications into upcoming solicitations.</p> <p>Continue to educate City staff about the EP3 policy and green alternatives to products currently being procured.</p> <p>Where possible, expand the use of local organic foods.</p> <p>Revise the EP3 to ban the use of municipal funds to procure expanded foam plastic food service ware.</p> <p>Implement the ban on expanded polystyrene packaging from shipments of goods bought by the</p>

Urban Environmental Accords Action	2011 Achievements and Milestones	Next Steps
	<p>San Jose joined with other bay area cities to discontinue accepting packaging made from expanded polystyrene.</p> <p>The Convention Center and Senior Meal Program continue to procure local organic foods.</p> <p>In 2011, The City began developing a <i>Community Risk Reduction Plan</i> with the help of the Bay Area Air Quality Management District. Once completed, the Plan will be used to facilitate infill projects in geographical areas that have been identified as having air quality health effects. The CRRP will lead to policies and mitigation strategies to reduce exposures to air toxins.</p>	<p>City.</p> <p>The City will determine how to address the new toxic air thresholds through the General Plan update process.</p> <p>Complete the Community Risk Reduction Plan.</p>
<p><i>Water</i></p> <p>19. Water Conservation 20. Water Quality Protection 21. Recycled Water and Watershed Management</p>	<p>The City continues to implement water conservation through a cost-sharing agreement with the Santa Clara Valley Water District for programs such as incentives for water-efficient retrofits, and by conducting outreach. The City is also drafting an ordinance to require water efficient landscaping in new development.</p> <p>Average Daily Water Use in San José is currently an estimated 121 gallons per person per day (compared to 147 when the Green Vision was adopted in 2007).</p>	<p>Continue various efforts to reduce per capita water use indoors and outdoors, and conduct outreach for water efficiency.</p> <p>Continue work towards adoption of ordinances that 1) require dual plumbing as part of new building design for sites near the recycled water pipeline, and for large building designs planned throughout the City wastewater enforcement; 2) 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>).</p>

Another strategy San José uses to implement the Accords is to collaborate with other California signatory cities through Green Cities California (GCC). GCC’s model environmental programs are available to the public through their well-received Best Practices Website [www.greencitiescalifornia.org](http://www.greencitiescalifornia.org) launched in late 2009. Several San José programs are highlighted on this website. The main focus of GCC in 2011 was on plastic bag bans. They anticipate focusing on urban food systems in 2012.

## Glossary

Abbreviation	Description
AB	Assembly Bill
ABAG	Association of Bay Area Governments
AD	Anaerobic Digestion
AFV	Alternative Fuel Vehicles
ARRA	American Recovery and Reinvestment Act
ASES	American Solar Energy Society
AWT	Advanced Water Treatment Facility
BAAQMD	Bay Area Air Quality Management District
BACC	Bay Area Climate Collaborative
BACT	Best Available Control Technology
BAFO	Best and Final Offer
BART	Bay Area Rapid Transit
BEP	Bicycle Expenditure Program
BIG	Build it Green
CAL FIRE	California Department of Forestry and Fire Protection
CAL-SLA	California City-County Street Light Association
CALGreen	California Green Building Standards Code
CAPCOA	California Air Pollution Controls Officers Association
CARB	California Air Resources Board
CCA	Community Choice Aggregation
CDBG	Community Development Block Grant
CDBG-R	Community Development Block Grant – Recovery
CDDD	Construction and Demolition Diversion Deposit
C&D	Construction and Demolition
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CFL	Compact Fluorescent Light
CIE	International Commission on Illumination
CIGS	Copper Indium Gallium Selenide
CMS	Content Management System
CNG	Compressed Natural Gas
CO <sub>2</sub> e	Carbon Dioxide Equivalents
CPUC	California Public Utilities Commission
CreaTV	San José Community Media Access Corporation
CSI	California Solar Initiative
CTDC	Clean Tech Demonstration Center
CTO	Clean Tech Open
DOE	Department of Energy
DOT	Department of Transportation
DPF	Diesel Particulate Filter
DWR	California Department of Water Resources
EDA	Economic Development Administration
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
EPS	Expanded Polystyrene
ESCOs	Energy Service Companies
ESD	Environmental Services Department



<b>Abbreviation</b>	<b>Description</b>
ETAP	Energy Technology Assistance Program
ETDC	Electronic Transportation Development Center
EUC	Energy Upgrade California
EV	Electric Vehicle
FERC	Federal Energy Regulatory Commission
FHFA	Federal Housing Finance Agency
FHWA	Federal Highway Administration
FITs	Feed-in-Tariffs
FY	Fiscal Year
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
HVAC	Heating, Ventilation, and Air Conditioning
ICMA	International City/County Management Association
IESNA	Illuminating Engineering Society of North America
i-Hub	Innovation Hub
J/ER	Jobs-to-Employed Ratio
K-12	Kindergarten Through 12 Grade
kW	Kilowatt
kWh	Kilowatt Hour
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
LLC	Limited Liability Company
LPG	Liquid Propane Gas
LPS	Low Pressure Sodium
MDF	Manufacturing Development Facility
MFD	Multi-Family Dwelling
MOU	Memorandum of Understanding
MPG	Miles Per Gallon
MW	Megawatt
MGD	Million Gallons Per Day
MMT	Million Metric Tons
MT	Metric Tons
MTC	Metropolitan Transportation Commission
NETS	National Establishments Time Series
NMTC	New Markets Tax Credits
NOx	Nitrogen Oxide
NCU	Neighborhood Clean Up
OCF	Our City Forest
OED	Office of Economic Development
O&M	Operations and Maintenance
PACE	Property Assessed Clean Energy
PGC	Public Goods Charge
PG&E	Pacific Gas and Electric
PM	Particulate Matter
PPA	Power Purchase Agreement
PRNS	Parks, Recreation, and Neighborhood Services
PV	Photovoltaic
PW	Department of Public Works
RAFT	Resource Area for Teaching

<b>Abbreviation</b>	<b>Description</b>
RES-BCT	Renewable Energy Self-Generation Bill Credit Transfer
RFI	Request for Information
RFI	Request for Interest
RFP	Request for Proposals
SAC	Solar America Cities
SB	Senate Bill
SBIR	Small Business Innovation Research
SBWR	South Bay Water Recycling
SCVWD	Santa Clara Valley Water District
SJ	San José
SJRA	San José Redevelopment Agency
SJSU	San José State University
SSV	Sustainable Silicon Valley
SVBC	Silicon Valley Bike Coalition
TDS	Total Dissolved Solids
T&E	Transportation and Environment
TOCKNA	Tully Ocala Capitol King Neighborhood Association
UC	University of California
UL	Underwriters Laboratories
US	United States
USBR	United States Bureau of Reclamation
USGBC	United States Green Building Council
VALE	Voluntary Airport Low Emission
VC	Venture Capital
VMT	Vehicle Miles Traveled
VTA	Valley Transportation Authority
WPCP	San José/Santa Clara Water Pollution Control Plant
ZWED	Zero Waste Energy Development Company

# Appendix A – Comprehensive Work Plan

## Leading by Example

Strategic Focus	Proposed Strategy	2011 Work Plan	2012 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.	Develop and use data and analysis to identify industry clusters, target policy, and track performance.  <b>Status:</b> OED staff has completed eight manufacturing assessments as potential manufacturing sites.	Continue to 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 on City owned buildings and land, and community-wide to support commercialization of clean technologies.  <b>Status:</b> Partnered with Armageddon Energy to install Solar Clovers on City Hall Wing.	Attract resources to support demonstration projects at the San José Environmental Innovation Center.
3. Greening of small businesses through BusinessOwnersSpace.com. (25,000 Clean Tech Jobs)	Launch resources to support greening of small businesses.	Develop an outreach strategy within the BusinessOwnerSpace partner network to implement Green Resource tool.  <b>Status:</b> Launched new Green Resource pages on BusinessOwnerSpace.com and a new Green Assessment Tool.	Complete BusinessOwnerSpace.com enhancements and implement outreach strategy.
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.  <b>Status:</b> Study Completed.	<i>Not applicable.</i>

Strategic Focus	Proposed Strategy	2011 Work Plan	2012 Work Plan
5. Implement energy efficiency projects in City facilities. <i>(50% Energy Reduction)</i>	<p>Partner with PG&amp;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-efficiency projects.</p> <p>Reduce municipal energy use by 5% from previous year.</p> <p><b>Status:</b> To date, 49 audits and 26 projects complete. Municipal energy use increased by 3% from previous year.<sup>1</sup></p>	<p>Complete 45 remaining EECBG 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>Complete analysis of, and prepare recommendations for additional municipal solar installations as based on submitted proposals.</p> <p><b>Status:</b> Awarded City facilities solar RFP to SolarCity. Working on first 4 City facilities.</p>	<p>Install solar on a minimum of 4 City facilities.</p>
7. Implement Private Sector Policy for New Construction. <i>(50 Million Sq. Ft. of Green Building)</i>	<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>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> <p><b>Status:</b> The City continues to implement the Green Building Policy and mandatory CALGreen measures. No Policy changes anticipated in the upcoming year.</p>	<p>Track State AB1103 and specific requirements for energy benchmarking and disclosure to facilitate energy upgrades to existing commercial buildings.</p>
8. Certify existing City facilities using LEED-EB Rating System. <i>(50 Million Sq. Ft. of Green Building)</i>	<p>Participate in USGBC Portfolio Program (now known as the Volume Program).</p>	<p>Certify four City buildings under LEED-EB Portfolio Program.</p> <p>Evaluate strategy to certify</p>	<p>Complete protocol precertification.</p> <p>Identify and pursue new funding sources that are aligned with program objectives.</p>

<sup>1</sup> There was a minor increase in municipal energy usage from 2009 to 2010, due primarily to an increase in energy usage at the Airport (as a result of the airport expansion) and Water Pollution Control Plant (less onsite cogeneration due to equipment repairs resulted in an increased electricity purchase from PG&E).

Strategic Focus	Proposed Strategy	2011 Work Plan	2012 Work Plan
<i>Building)</i>		additional City facilities under the Portfolio Program.  <b>Status:</b> USGBC Portfolio Pilot Program transitioned to the LEED Volume Program for EB in June 2011. The City registered to participate in this program in July 2011.	
9. Advance Commercial Redesign. <i>(Zero Waste &amp; Waste to Energy)</i>	Implement contracts with Allied Waste and Zero Waste Energy Development that offer a range of services to SJ businesses while complying with state mandated diversion and furthering Green Vision and other City policies.	Provide award recommendations to Council.  <b>Status:</b> Complete.  Complete franchise negotiations.  <b>Status:</b> In Progress.  Begin transition process to new exclusive franchise haulers.  <b>Status:</b> In Progress.	Complete transition process to Allied Waste and ZWED to go live on July 1, 2012.  As information becomes more available through transition and start of service, work with Allied and ZWED to ensure maximum recovery of materials.
10. Streamline Construction Demolition Diversion Deposit (CDDD) program. <i>(Zero Waste &amp; Waste to Energy)</i>	Develop new program/reporting requirements for C&D facilities.	<i>Did not have a 2011 work plan item.</i>	Develop outreach material to communicate waste diversion requirements for new construction projects.
11. Maximize diversion and safe disposal opportunities for residents. <i>(Zero Waste &amp; 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.  <b>Status:</b> Completed pilot programs, and currently evaluating results.  Evaluate options for expansion of the NCU program.	Finalize evaluation of results of RecyclePlus pilot programs and develop options for future program enhancements to achieve Zero Waste.  Implement RecyclePlus recycling rewards pilot program to multifamily residents as a way to incentivize recycling, increase diversion, and decrease contamination of recyclable material.  Complete EIC construction by December 2012.



Strategic Focus	Proposed Strategy	2011 Work Plan	2012 Work Plan
		<p><b>Status:</b> Complete.</p> <p>Pursue NMTC to complete Phase II funding. Begin Phase II construction of San José EIC in early Summer 2011 to provide permanent San José HHW collection site.</p> <p><b>Status:</b> Completed NMTC transaction. Phase II construction has started.</p>	Prepare for opening of HHW facility in Spring 2013.
12. Eliminate litter to achieve Zero Waste. <i>(Zero Waste &amp; Waste to Energy)</i>	Reduce use of disposable, single use items that contribute to litter, including single-use carryout bags, water bottles, and polystyrene takeout food packaging.	<p>Develop policies and programs to reduce litter.</p> <p><b>Status:</b> Developed single-use carryout bag policy.</p> <p>Submit ordinance to Council for adoption in Spring 2011.</p> <p><b>Status:</b> Complete.</p> <p>Initiate transition to support new ordinance.</p> <p><b>Status:</b> Developed <i>Bring Your Own Bag Campaign</i> engagement strategy and ordinance took effect January 1, 2012.</p>	<p>Evaluate options for expansion of the street sweeping program.</p> <p>Implement Council direction to halt the purchase and use of EPS food service ware at City facilities and City funded events.</p> <p>Continue to research impacts of a City-wide EPS policy and evaluate other alternatives for eliminating EPS litter.</p>
13. Drive large San José events toward Zero Waste. <i>(Zero Waste &amp; Waste to Energy)</i>	Provide education and assistance to event organizers and food vendors to increase waste diversion.	<p>Develop comprehensive educational tools for zero waste event organizers.</p> <p><b>Status:</b> Developed resources available online, including <i>Greening Guidelines for Events</i>.</p>	Expand Green Event Certification and Grant programs to cover additional events. Coordinate Green Event Grant process and timeline with OCA grant program and co-promote to events.

Strategic Focus	Proposed Strategy	2011 Work Plan	2012 Work Plan
14. Determine the most effective and efficient options to expand uses of Recycled Water. <i>(Recycle or Beneficially Reuse Wastewater)</i>	Identify options as part of the Strategic Planning process.	Incorporate industry suggestions from 2010 outreach into revised ordinance and re-propose to Transportation and Environment Committee.  <b>Status:</b> Deferred. Requiring prescriptive expansion has been replaced with incentive-based programs promoting recycled water use and developer funded expansion efforts.	Commence Strategic Planning effort.
15. General Plan Update. <i>(Sustainable General Plan)</i>	Complete Envision San José 2040 General Plan.	Complete environmental review (EIR) and adopt General Plan Update, including Goal #7 Sustainability Measures.  <b>Status:</b> Complete.	Develop a Council Implementation Policy for the Greenhouse Gas Reduction Strategy; prepare Urban Village Plans and revise the Zoning Ordinance to facilitate sustainable urban development in identified focused Growth Areas.
16. Reduce fuel consumption and GHG emissions. <i>(100% Public Fleet on Alternative Fuels)</i>	Use higher fuel efficiency vehicles in public safety fleet.	Complete the evaluation/ pilot process of purpose built patrol vehicles. Develop an updated procurement specification for the new vehicle standard.  <b>Status:</b> Continue procurement of actual test vehicles; deploy to field operations as part of evaluation.	Complete one cycle of procurement of new patrol vehicles during calendar year 2012.
17. Reduce Citywide streetlight energy consumption. <i>(100,000 Trees &amp; Zero Emission Lights)</i>	Develop streetlight design guide that will guide the City when it replaces existing lights, installs new LED lights, and dims lights during off-peak hours.  Use federal grant funds to convert LPS streetlights	Council adoption of Streetlight design guide in winter 2011.  Council adoption of interim standards for the use of broad spectrum lights for Outdoor Lighting on Private Developments consistent with the Streetlight Master Plan.	Install approximately 2,100 network-controlled dimmable LED streetlights.  Staff intends to proceed with a comprehensive update to the Policy on Outdoor Lighting on Private Development (City Council Policy #4-3).

Strategic Focus	Proposed Strategy	2011 Work Plan	2012 Work Plan
	to LED with adaptive controls.	<p>Install 2,200 more lights in the next two years as a result of \$2.9 million in federal grant funding.</p> <p><b>Status:</b> Council adopted design guidelines and outdoor lighting policy.</p> <p>Staff completed RFP solicitation and selected contractor to provide approximately 2,100 network-controlled dimmable LED streetlights.</p>	
18. Expand City's trail network. <i>(100 Miles of Interconnected Trails)</i>	Identify priority areas to expand the interconnected trail network.	<i>Did not have a 2011 work plan item.</i>	Start pavement of Lower Guadalupe River Trail (6.4 miles) and Highway 237 Bikeway Trail (0.8 miles)
19. Expand City's bike network. <i>(100 Miles of Interconnected Trails)</i>	Implement "Bike Plan 2020", the council-approved citywide bike plan.	<p>Install 10 miles of bike lanes, bike routes and bike boulevards.</p> <p>Install 500 public bike parking spaces.</p> <p><b>Status:</b> 6 miles of bike lanes and 200 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	2011 Work Plan	2012 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.	Partner with clean tech industry, and regional advocacy groups to develop Clean Tech Legislative Agenda for Silicon Valley.  <b>Status:</b> 2011-2012 Clean Tech Legislative Agenda Adopted May 2011.	Partner with clean tech industry, and regional advocacy groups to develop 2012-2013 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 cool communities, smart meters, and other energy opportunities.  <b>Status:</b> Ongoing.  Support and coordinate with statewide partners currently developing alternatives to PACE for residential customers.  <b>Status:</b> Ongoing.	Support and coordinate with statewide partners to develop a Commercial PACE program.
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.	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.	Participate on the Local Government Sustainability Commission and the City will continue to monitor and provide input on CPUC rulings and draft legislation.

Strategic Focus	Proposed Strategy	2011 Work Plan	2012 Work Plan
		<b>Status:</b> Ongoing, provide input on CPUC rulings and draft legislation.	
4. Monitor and advocate for legislation that enables the implementation of the General Plan. <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.  <b>Status:</b> Ongoing.	On-going review and analysis as needed.
5. Change State regulation to allow cost effective metering of individual lights. <i>(100,000 Trees &amp; Zero Emission Lights)</i>	Advocate CPUC regulatory changes.	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.  <b>Status:</b> CPUC approved PG&E tariff pilot; San José will participate in 3 year pilot, including the 2,100 network-controlled dimmable LED streetlights.	Launch first year of PG&E dimmable streetlight tariff pilot.



**Financing Mechanisms**

Strategic Focus	Proposed Strategy	2011 Work Plan	2012 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.	Continued efforts to access resources to support clean tech industry.  <b>Status:</b> EDA Application approved for \$2.35 million for the EIC.	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.	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.  <b>Status:</b> Commenced Community Energy Champions Grants program and Municipal Whole House Rehabilitation Pilot.	Continue and complete two Innovator Pilot programs.  Evaluate different funding models to support energy efficiency projects beyond pilot programs.
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.	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.  <b>Status:</b> Initiated discussions with industry stakeholders to identify areas where the City could play a role to help accelerate wide	Continue to work with other City departments, external stakeholders, and PG&E on financing mechanisms for solar.

Strategic Focus	Proposed Strategy	2011 Work Plan	2012 Work Plan
		spread adoption of energy efficiency investments and solar installations.	
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>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> <p><b>Status:</b> Working group will be convened in early 2012 to develop next steps.</p>	Will continue discussions with community groups on what, if any, role the City should play.
5. Determine funding options for recycled water infrastructure, operations and maintenance, and expansion. <i>(Recycle or Beneficially Reuse Wastewater)</i>	Identify options as part of the Strategic Planning process.	<p>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.</p> <p>Support adoption of new sanitary sewer treatment plant connection fee.</p> <p><b>Status:</b> SBWR obtained ~\$5.6M in state and federal grant funding supporting program expansion.</p>	Continue to work with USBR to maximize funding opportunities in support of increasing SBWR return on investment and system reliability.
6. Leverage grants. <i>(Sustainable General Plan)</i>	Seek outside funding sources for sustainability planning activity and implementation of the General Plan.	<p>Leveraged General Fund support. Applied for four sustainable land use planning grants.</p> <p><b>Status:</b> Received grants from</p>	Continue to apply for planning grants in order to support development of Urban Village Plans and other General Plan implementation actions.

Strategic Focus	Proposed Strategy	2011 Work Plan	2012 Work Plan
		VTA, MTC and Health Trust for Urban Village planning/rezoning.	
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.	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.  <b>Status:</b> Initial grant funded work complete; full compliance by July 2012.	Complete on-road diesel retrofit and retire non-compliant vehicles. Continue to seek opportunities for Off-road diesel equipment retirements and replacements including grant funding if available.
8. Increase the care of the community forest and meet the Green Vision planting goal. <i>(100,000 Trees &amp; Zero Emission Lights)</i>	Prepare long range plans for an alternative funding mechanism for street tree maintenance and planting.	<i>Did not have a 2011 work plan item.</i>	Continue progress in the street tree inventory project. Research various options for a long-term alternative funding mechanism using data from the street tree inventory data already collected (60% complete).  Reach out to neighborhood groups to explore potential creation of short-term pooled tree maintenance contracts.
9. Identify funds to upgrade to smart, energy-efficient streetlights. <i>(100,000 Trees &amp; Zero Emission Lights)</i>	Require energy- efficient lighting for new development; Identify Federal & City funding sources; Investigate potential for pooled purchase to improve purchase price and financing options.	Continue to seek grant funding for conversions.  Revisit question about financing larger scale conversion.  <b>Status:</b> Obtained \$2.9 million in grant funds to convert 2,100 streetlights.	Continue to seek financing and grant opportunities to fund conversions.
10. 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.	Continue to seek Council direction to pursue every applicable grant opportunity for trail development.  <b>Status:</b> City Council directed staff	Pursue 5 competitive grants (minimum)

Strategic Focus	Proposed Strategy	2011 Work Plan	2012 Work Plan
		to pursue approximately \$21 million in grant funding. So far \$1 million has been secured.	
11. Fund expansion of bikeway network. (100 Miles of Interconnected Trails)	Seek grants to help expand and improve bikeway network.	<i>Did not have a 2011 work plan item.</i>	Seek grants that match <i>Bike Plan 2020</i> goals.

**Strategic Partnerships**

Strategic Focus	Proposed Strategy	2011 Work Plan	2012 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>Continue to partner with workforce training providers to develop clean tech training opportunities.</p> <p><b>Status:</b> In 2011, 73 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&amp;D resources, and commercialization support.</p>	<p>Scope cool technology partnership and form industrial partnerships to support effort.</p> <p><b>Status:</b> MOU drafted and approved. Currently, soliciting feedback and information from potential private sector industry partners.</p>	<p>Advance partnership efforts with LBNL, academic institutions, manufacturers and incubators, accelerators and business plan competitions.</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 programs that minimize gaps and redundancies in program delivery.</p> <p>Coordinate with local workforce development and training providers to ensure a robust clean</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</p>	<p>Continue to refer residents to EUC Santa Clara County program.</p> <p>Better Buildings Program implementation will continue through September 2012. Will seek extension options with DOE through September 2013 to leverage energy efficiency upgrades in additional neighborhoods.</p>



Strategic Focus	Proposed Strategy	2011 Work Plan	2012 Work Plan
	energy workforce that links to utility- and government-funded energy programs.	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.  <b>Status:</b> In 2011, the Better Buildings Program reached over 160 homes.	
4. Develop waste to energy technology infrastructure at the City's WPCP. ( <i>Zero Waste &amp; 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.	Begin construction of dry fermentation AD facility at Nine Par.  <b>Status:</b> In Progress  Conduct Feasibility study of gasification pilot unit.  <b>Status:</b> In Progress  Integrate conversion options into new commercial system design.  <b>Status:</b> Complete	Complete Landfill post-closure site preparation.  Complete Permitting Process for AD facility construction.  Begin feedstock testing for AD system.  Complete feasibility study for gasification pilot recommendations.  Meet contract milestones for construction of dry fermentation AD system.  Design and construct pilot FOG receiving station at the Plant.
5. Develop the SCVWD and other agency partnerships to further the objectives of SBWR. ( <i>Recycle or Beneficially Reuse Wastewater</i> )	Take advantage of strategic partnering opportunities to leverage SBWR resources effectively.	Implement agreement with the SCVWD for operation and maintenance of the AWT.  <b>Status:</b> Draft language developed for O&M agreement. Adoption of the agreement is expected in spring 2012.	Approval of regulatory permits and O&M agreement between the City and SCVWD.  Engage Tributary agencies, the SCVWD, and other potential partners in the Strategic Planning effort.
6. Support the State's goals for additional use of recycled water which leverage state and	Participate in regional and State recycled water efforts and forums which further SBWR objectives.	Continue to support and develop efficient and consistent regulated uses of recycled water in the region and State.	Continue to support and develop efficient and consistent regulated uses of recycled water in the region and State, engage in regulatory efforts restricting recycled water use to protect

Strategic Focus	Proposed Strategy	2011 Work Plan	2012 Work Plan
regional resources to meeting SBWR objectives. ( <i>Recycle or Beneficially Reuse Wastewater</i> )		<b>Status:</b> In progress. State activities have been minimal in 2011.	groundwater.
7. Stronger advocacy; broaden partnerships. ( <i>Sustainable General Plan</i> )	Increase role as an advocate in State / Regional planning and grow partnerships with non-profits.	Participated in MTC, ABAG, and BAAQMD regional planning initiatives.  <b>Status:</b> Partnered with CommUniverCity and the Health Trust to plan healthy sustainable communities.	Continue to participate in MTC, ABAG, 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.	Implement MTC and CEC Grant projects.  Collaborate with regional partners in future grant solicitations.  Develop a local strategy to deploy a Car Share 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.  <b>Status:</b> Working on agreement terms for battery swap stations and starting to install EV chargers. RFP issued to select a car share provider.	Move forward with the development of two battery switch stations and 52 EV charging stations.  Launch car share program in late Spring-early Summer.
9. Expand, maintain, and track new community forest tree plantings through partnerships with residents and	Continue to build upon and enhance Our City Forest partnership through collaborative initiatives. Jointly pursue other partnerships that	Continue progress on finishing the complete street tree inventory effort by seeking grant funding and using existing City resources and OCF.	Seek funding to complete street tree inventory.  Continue to work with Our City Forest to leverage resources, including promoting the OCF Community Nursery and successfully relocate OCF offices.

Strategic Focus	Proposed Strategy	2011 Work Plan	2012 Work Plan
community groups. <i>(100,000 Trees &amp; Zero Emission Lights)</i>	might advance City's tree goals.	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.  <b>Status:</b> 60% of inventory complete. OCF opened tree nursery which supports community forest goals. Continued pilot with Downtown Association and tree service provider.	Continue Four-Year Tree Management Plan for street trees in the downtown core in partnership with the Property-Based Improvement District and Downtown Association.
10. Leverage partnerships to research heat island effect and determine priority areas to develop the community urban forest tree canopy. <i>(100,000 Trees &amp; Zero Emission Lights)</i>	Partner with LBNL, for data support, planting demonstration projects, and ties to energy efficiency measures.	Scoped work plan along with other City staff from OED and ESD on urban vegetation as part of LBNL's Cool Cities pilot.  <b>Status:</b> Awaiting response on Urban Greening Grant, which includes 20 native, drought-resistant trees and LBNL heat island research component.	Pursue grant funding in collaboration with LBNL's Cool Cities pilot.
11. Power existing streetlights with renewable energy. <i>(100,000 Trees &amp; Zero Emission Lights)</i>	Investigate all options to cost-effective generate renewable energy to power streetlights.	Develop a strategy to backfill City's streetlight energy requirements with renewable energy.  <b>Status:</b> Currently it is not viable for the City to power streetlights directly with renewable energy. Staff will continue to track this item if viable in the future.	<i>Not applicable.</i>

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12. Expand and maintain trail network through partnerships. <i>(100 Miles of Interconnected Trails)</i>	Establish partnerships with non profits and private entities.	Implement Trail Watch Program.  <b>Status:</b> Staff is registering first 5 volunteers who commit to monitor the Guadalupe River Trail.	Partner with the Bay Area Open Space Council to include all San José trails on the Transit & Trails Smart Phone application.

**Communications and Engagement**

Strategic Focus	Proposed Strategy	2011 Work Plan	2012 Work Plan
<p>1. Implement community-wide energy efficiency programs. (50% Energy Reduction)</p>	<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>Status report to Council on implementation of Strategic Action Plan in March 2011.</p> <p><b>Status:</b> Complete.</p> <p>Implementation of Better Building Program and Innovation Pilot program.</p> <p><b>Status:</b> Commenced pilot programs.</p> <p>Continue quarterly updates and ongoing enhancements of Silicon Valley Energy Map.</p> <p><b>Status:</b> Due to staffing and resource limitations, the SVEW map was not updated in 2011. Updates will occur in 2012.</p> <p>Develop Energy Efficiency Exhibit as part of San José Green Vision Clean Energy Showcase.</p> <p><b>Status:</b> Complete.</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> <p><b>Status:</b> Complete.</p>	<p>Will seek extension options with DOE through September 2013 to leverage energy efficiency upgrades in additional neighborhoods.</p> <p>Complete major update to Silicon Valley Energy Map.</p>



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2. Expand knowledge and awareness of renewable energy program resources. <i>(100% Clean, Renewable Electricity)</i>	Work in partnership with businesses and organizations throughout community.	<p>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.</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> <p><b>Status:</b> ESD leveraged SAC grant to develop the <i>Bright Green San José</i> concept to help advance all of the City's environmental Initiatives.</p>	<p><i>Not applicable.</i></p> <p>Nothing planned in 2012 due to lack of resources</p>
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.	<p>Engage stakeholders on implementation of Green Building Policy for new construction and CALGreen to inform potential policy on renovations and retrofits.</p> <p><b>Status:</b> November 16 panel discussion convened.</p>	<i>Not applicable.</i>
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.	<p>Update Outreach Material to reflect CALGreen requirements.</p> <p><b>Status:</b> Continue ongoing outreach and education activities including staff training, communication with stakeholders in the development community.</p>	Conduct additional outreach and education for staff and development community.

Strategic Focus	Proposed Strategy	2011 Work Plan	2012 Work Plan
5. Increase awareness about green initiatives at San José schools. <i>(Zero Waste &amp; Waste to Energy)</i>	Provide educational opportunities for and assistance to schools about recycling and waste reduction, energy and water use reduction, healthy buildings, and transportation alternatives including the Safe Routes to Schools program.	Complete pilot Green Star School certification program.  Launch Green Star School certification program.  <b>Status:</b> 10 schools received Green Star certification. Working with partners to continue and expand certification program.	Conduct outreach to encourage participation in Green Star School certification program.
6. Create cost effective public and private partnerships to facilitate marketing recycling water. <i>(Recycle or Beneficially Reuse Wastewater)</i>	Partner with SSV to launch the EcoCloud™, a virtual industrial ecosystem where industry, government and educational institutions can work together to become more sustainable.	Assist with EcoCloud™ website development, workshops, and other project to facilitate customer connection.  <b>Status:</b> SBWR contributed to components that were incorporated into EcoCloud website.	<i>Not applicable.</i>
7. Effectively engage potential customers and other stakeholders on the benefits of recycled water. <i>(Recycle or Beneficially Reuse Wastewater)</i>	Increase Recycled Water customers and partners.	Collaborate with non-profit, academic and private sector partners to facilitate the use of recycled water. Implement web-based social networking tools to enhance marketing by creating a community of industrial customers.  <b>Status:</b> Conducted 3 training workshops.	Continue to effectively collaborate with non-profit, academic, and private sector partners to increase the use of recycled water for customers along existing SBWR pipelines.
8. Publicize Envision San José 2040 General Plan policies. <i>(Sustainable General Plan)</i>	Focused civic engagement with identified stakeholders and community organizations, First	Completed award-winning Phase II Outreach activities, engaging approximately 5,000 community members.  <b>Status:</b> Directly engaged 5,000+	Engage the community in Envision General Plan Implementation elements, such as Zoning Ordinance amendments and Urban Village Plans through community meetings, website information, and other modes; engage Planning Commission in creation of Urban Village zoning districts; and

Strategic Focus	Proposed Strategy	2011 Work Plan	2012 Work Plan
	Horizon village area residents.	community members, hosted 50+ citywide stakeholder group presentations, sent 9,000+ letters to identified affected property owners, and sent information mailer to 240,000 residential households.	engage developers to catalyze new development in focus areas.