CITY OF SAN JOSE
CAPITAL OF SILICON VALLEY

# *Memorandum*

**TO:** HONORABLE MAYOR AND CITY COUNCIL

**FROM:** Debra Figone

**SUBJECT:** **SEE BELOW**

**DATE:** February 25, 2009

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**SUBJECT: ANNUAL GREEN VISION STATUS REPORT AND 2009 WORK PLAN**

## RECOMMENDATION

Approval of the Green Vision Annual Status Report and adoption of the 2009 work plan.

## OUTCOME

The attached Annual Status Report on San José's Green Vision provides an opportunity for the Mayor and Council to review the progress made on the implementation of the Green Vision and opportunities and challenges for each of the goals and adopt the 2009 work plan.

## EXECUTIVE SUMMARY

I am pleased to present the 2008 Annual Report on San José's Green Vision. The attached report provides information about the past year's accomplishments, discusses areas of strategic focus for 2009 and outlines the required action to continue progress toward attaining the City's ambitious Green Vision. This overview highlights the major accomplishments of 2008 as well as key strategic focus areas for 2009. In particular, you will see that priority actions have been organized into a strategic action framework. With an undertaking so far-reaching that requires engagement throughout the City organization and the community at large, this framework facilitates the connection between individual actions and overall Green Vision achievement. This report was developed in coordination with all City departments directly and indirectly responsible for the implementation of the Green Vision.

## Background

The City has long been a leader in environmental stewardship through its efforts to recycle waste, conserve water, reuse wastewater, and develop in a sustainable manner. It has successfully pioneered many environmental initiatives from recycled water and curbside recycling to establishing an urban growth boundary.

The City is also known as a center for innovation and entrepreneurship where ideas and inventions change the world. More so than any region of the world, San José and Silicon Valley is defined by the ability and willingness to innovate and change. From the defense technologies of World War II and the semiconductors and computers of the information age, to biotechnology and the evolution of the Internet, local innovations have changed the world.

The fundamental changes required to confront global climate crisis and end domestic dependence on fossil fuels present an opportunity for San José to leverage its strengths to develop innovative solutions to these interconnected challenges, creating both economic opportunity and a sustainable environment for future generations. Here in San José, local companies are already commercializing and producing clean technology solutions in renewable energy, energy efficiency, green building materials, control systems, alternative fuels, and clean transportation. These companies are transforming San José into a world center of Clean Tech innovation with thousands of new jobs and billions of dollars of new investment.

## Green Vision Goals

Recognizing the opportunity to seize a global market opportunity and ensure San José's position as a model 21st century city, the City Council, in October 2007, adopted San José's Green Vision, a bold roadmap that is intended to model how innovation and environmental responsibility can strengthen economic opportunity and can, in fact, be vital catalysts for spurring prosperity. Thus, success of the Green Vision will really be measured by a triple bottom line: strengthen the regional economy, create a more sustainable community, and enhance the quality of life for residents.

The Green Vision lays out ten aggressive goals, listed and described below, that the City is working with residents and businesses to achieve by 2022. By pursuing these goals, San José has resolved to help lead the nation out of the current economic recession by inspiring new careers and industries, becoming more energy efficient, producing and using electricity from clean renewable sources, creating green buildings, diverting waste from landfills, creating greener street systems, expanding delivery of recycled water, and reducing greenhouse gas emissions.

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| **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. |
| **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. |

## Strategic Action Framework

Implementing the Green Vision goals will require sustained focus and a willingness to change service delivery models, re-evaluate investment decisions, secure policy and regulatory changes from other levels of government, and explore innovative public-private partnerships. Some of this foundation was laid in 2008, but focused and sustained attention to high-return activities will be required to achieve the goals. This effort has been made more challenging given fiscal constraints exacerbated by the national recession. However, within this current global economic crisis and the local structural budget deficit are opportunities for the Green Vision to be a catalyst for reducing operating expenses and generating new revenues.

Given the complexity of actions necessary to realize the Green Vision, staff has developed a strategic action framework that will help focus staff efforts and prioritize resource allocation to maximize effectiveness. Specifically, the strategic action framework:

- Helps staff and stakeholders connect their individual actions to the overall achievement of Green Vision goals by focusing attention on activities that will produce a strong return on investment towards advancing City priorities, such as creating a vibrant economy and improving access to services.
- Identifies opportunities for stakeholders, such as neighborhood groups and industry associations, to be involved in ways that maintain focus on near-term priorities such as preserving key services by reducing long term operating expenses through investments in energy efficiency and renewable energy production.
- Prioritizes near-term actions that are critical to the long-term achievement of the Green Vision goals, such as adoption of policies, including the private sector green building policy and the zero waste master plan, that provide a clear critical path to achieving individual goals.

- Ensures coordination among Green Vision goal teams and "One Voice" communication to leverage investments across goals, remove bureaucratic obstacles to progress, and adapt to new opportunities as they arise.
- Supports the pursuit of long-term strategies like developing model procurement documents for renewable energy, waste-to-energy, and clean tech streetlights that are necessary for wide-spread adoption of technology necessary to advance some goals, recognizing that not all goal progress will be linear and instead require policy or technology breakthroughs which will facilitate exponential progress.

The framework connects the Green Vision goals, implementation strategies, and project-level day to day actions to the broader intended outcomes of driving economic opportunity and growth, eliminating the structural budget deficit, demonstrating environmental leadership, and improving quality of life throughout community. Actions are categorized into the following strategies:

- ***Leading by example*** – Policies and practices that the City can modify or establish to advance the Green Vision priorities
- ***Advocating policies at the regional, state and federal level*** – Advocating legislative action and positioning the City to partner with other agencies on policy changes and development
- ***Financing mechanisms*** – Exploring new financing mechanisms to supplement City dollars such as grants, modified fee structures, and improvement districts
- ***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

This strategic approach facilitates collaboration and leveraging of resources between the various goals, highlights key priorities and challenges, and connects staff level work to intended outcomes.

**Recent Accomplishments**

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

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| Goal 1 | 3,250 Clean Tech jobs created by San José companies, including several manufacturing facilities |
| Goal 2 | Energy efficiency savings of $435,000 in 2008 |
| Goal 3 | Facilitated adoption of more than 5 MW of solar across the community. Passage of two key pieces of legislation: State passage of AB2466 to allow municipal facilities get up to 1 MW of credit for excess energy generation and Federal renewal of the renewable energy investment tax credit |
| Goal 4 | Adoption of Private Sector Green Building Policy for new construction; added 330,000 square feet of certified green buildings |
| Goal 5 | Improved recycling at city facilities, including sorting all waste at an off-site facility; increased municipal recycling for all operations, including the |

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| | Airport, Convention Center, libraries, and City Hall, to 75% of total disposal. |
| Goal 6 | Increased average daily use of Recycled Water by almost 1 million gallons per day |
| Goal 7 | Conducted extensive stakeholder outreach; General Plan Task Force made significant progress towards recommending sustainable and measurable goals |
| Goal 8 | Transitioned to B20 biodiesel for the entire diesel fleet |
| Goal 9 | Adopted street lighting policy to ensure all new lights are smart energy efficient lights |
| Goal 10 | Expanded trail and on-street bike lanes by eight miles |

**Strategic Focus for 2009**

In these challenging economic and environmental times, it is critical for the City to be able to establish clear priorities, adapt to emerging opportunities, and to leverage resources to advance the Green Vision goals. The current crisis also presents tremendous opportunities that could stimulate long-term economic prosperity for San José and the region. The 2009 work plan comprises of key strategic focus areas which will help ensure Council alignment on upcoming priorities in a contextual framework and also hone in on some of the challenges associated with advancing these priorities. A few examples of the work plan elements are included below by strategic area:

a. Leading by Example
   - Save 20% in energy costs through efficiency improvements at City facilities; install solar on City facilities with a target of 10 MW in 2010; pilot more fuel efficient vehicles in patrol fleet
   - Council adoption of Strategic Energy Plan for San José, Master Lighting Plan for streetlights, and private street lighting policy; adoption of ordinance for private sector green building policy
   - Design new commercial solid waste system and initiate procurement process for new haulers/recyclers
b. Advocating Policies
   - Advocate state and federal policies to support City's Clean Tech Legislative agenda to attract clean tech companies and create market for clean tech products
   - Work with PG&E, CEC and CPUC to advance use of energy areas or smart grids
   - Advocate CPUC regulatory changes to adopt tariffs for LED lights and billing based on real energy consumption for streetlights
c. Financing Mechanisms
   - Facilitate financing access for energy efficiency and renewable projects in the community
   - Recommend development fee for expanding recycled water infrastructure
d. Strategic Partnerships
   - Identify key partners and launch program for workforce development
   - Collaborate with public and private entities to provide the most efficient waste to energy solutions

- Long term agreement with Santa Clara Valley Water District to expand recycled water uses
- Collaborate with other jurisdictions to develop regional standards for electric vehicle infrastructure
- Increase number of trail miles adopted through Adopt-a-Trail program; expand tree planting program through strategic partnerships

e. Communications and Engagement
- Solicit stakeholder input to develop framework for existing buildings green building policy with a focus on economic and environmental benefits
- Develop a public information campaign to increase awareness of recycled water benefits
- Continue extensive civic engagement efforts to develop sustainable measures in General Plan Update
- Increase residential awareness and action with a focus on energy efficiency and waste conservation; promote San José as a center for technical innovation, fiscal sustainability and environmental stewardship

**Conclusion**

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

This report highlights strategic focus areas for 2009 for each of the goals. Some examples of areas that directly align with our economic interests are:

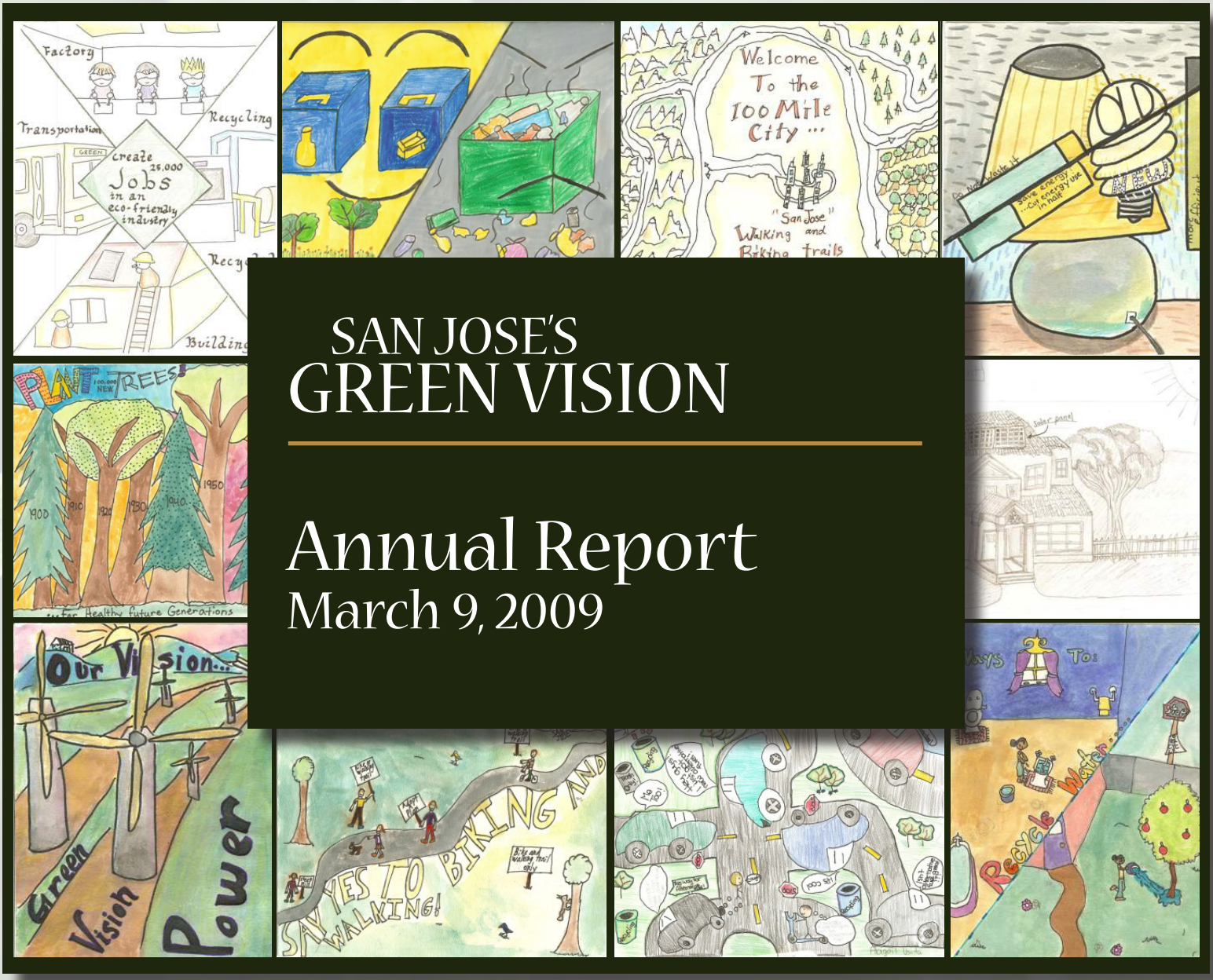
a. a Clean Tech legislative agenda to create jobs and increase local investment;
b. a framework for the greening of existing buildings with an emphasis on O&M savings;
c. alternate energy projects which will reduce our dependence on fossil fuels and result in long term savings;
d. testing private interest in waste-to-energy conversion technologies which will not only reduce landfills but also create a new revenue source;
e. a street lighting master plan which will allow us to save on energy costs;
f. strategic partnerships in several goals that will allow us to leverage our funding and resources

These and other initiatives will be brought forward to Council Committees and the full Council over the course of this year. This report helps highlight some of the key areas that are critical to the advancement of the Green Vision and enables Council to be able to make decisions related to these initiatives through 2009.

Progress on individual goals will be communicated to the Mayor and Council through regular informational memos in 2009 and the next Annual Report will be brought forward in early 2010. The City will continue to provide progress reports and engage employees and the broader community through the Green Vision website and a variety of print and electronic media as well as through targeted goal specific stakeholder outreach.

The implementation of the Green Vision is a collaborative effort involving staff from all City departments. I would like to acknowledge the City Council's leadership, as well as the outstanding efforts provided by the many employees who made direct contributions to the actual implementation of goals as well as to the production of this report.

Debra Figone
City Manager




# SAN JOSE'S GREEN VISION

## Annual Report

March 9, 2009

CITY OF SAN JOSE
CAPITAL OF SILICON VALLEY

This is a publication of the City of San José
photography by City of San José staff
front cover illustrations were part of an art contest from the Mayor's office.
Children, 13 years old or under throughout San Jose, were asked to submit their creative
interpretations of the ten Green Vision Goals.

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# Introduction

San José has long been a leader in environmental stewardship through its efforts to recycle garbage, conserve water, reuse wastewater, and protect the foothills. The City is also known as a center for innovation and entrepreneurship with ideas and inventions that have changed the world. More so than other regions, San José and Silicon Valley are defined by their ability and willingness to innovate and change.

Ensuring a sustainable future for current and future generations will require San José and Silicon Valley to harness their history of environmental leadership and innovation. Clean Technology advancements under development from this region have the potential to mitigate and allow adaptation to the effects of global warming, develop a viable alternative fuel market to fossil fuels, and create a healthier environment for generations to come. Here in San José, local companies are already commercializing and producing many of these technologies. Leaders in solar technology, alternative fuels, new transportation systems, energy-efficient lighting, and energy monitoring systems innovation are transforming San José into a center of Clean Tech innovation with thousands of new jobs and billions of dollars of new investment.

Recognizing the opportunity afforded by the combination of these strengths, the City Council, in October 2007, adopted San José's Green Vision, a bold roadmap that is intended to model how innovation and environmental responsibility are inextricably linked to economic opportunity and can, in fact, be vital catalysts for spurring economic growth. Thus, success of the Green Vision will really be measured by a triple bottom line: environmental sustainability, economic growth, and quality of life.

The Green Vision lays out ten goals that will allow San José to lead the nation out of the current economic recession by becoming more energy efficient, producing and using electricity from clean renewable sources, creating green buildings, diverting waste from landfills, creating greener street systems, delivering recycled water, and reducing greenhouse gas emissions.

The City has made significant progress since the adoption of the Green Vision. San José is now home to more than 3,200 clean tech jobs; 330,000 square feet of green buildings have been added, improved recycling at municipal facilities has resulted in a 75% diversion rate from the landfill, and the City has realized approximately $435,000 in annual General Fund savings from energy-efficiency improvements at City facilities.

This report details accomplishments in the past year and discusses the strategic focus for 2009 along with the diverse challenges and potential solutions needed for realizing the long-term vision.

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*San José, California*

## Strategic Framework

Achieving the Green Vision goals requires unprecedented collaboration and adaptability among City departments, aggressive advocacy of policies at the Federal and State levels, strong public-private partnerships, strategic use of limited resources, and substantial civic engagement. To foster this paradigm shift, City staff has organized itself and established a detailed work plan to address cross-cutting strategic challenges that must be overcome to implement the ten goals.

A Green Vision Steering Committee of executive and senior staff members convenes to lead the implementation efforts with dedicated goal leads to ensure progress. The outcomes of this effort in the first year have been communicated to Council through regular informational memoranda, which highlighted progress and key strategic opportunities and challenges.

The work plan for achieving the ten goals is built around a strategic framework that connects the Green Vision goals, priority areas within each goal, implementation strategies, and project-level tactics to the broader intended outcomes of driving economic opportunity and growth, eliminating the structural budget deficit, demonstrating environmental leadership, and improving quality of life throughout the community.

The framework for advancing each goal is structured around the five following strategic areas:

- ***Leading by example*** – A critical component of the Green Vision's success will be the City's ability to prove itself as a leader, not only by mapping a sustainable future for the City and its residents, but also by being an early adopter of a sustainable way of life. In order to do this the City needs to review its existing policies and practices and modify them as necessary to help support and advance the Green Vision goals. In 2008 the City has done this in several areas such as Clean Tech jobs and work force development, green buildings, zero waste and smart energy efficient street lighting.

- ***Advocating policies at the regional, state and federal level*** – Although the City hopes to continue making great strides in policy development that supports the Green Vision, significant progress in many areas is very much dependent on policies at the regional, state and federal level. Advocating policy at the state and

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

*San José City Hall*

- ***Financing mechanisms*** – Realizing the Green Vision strategy is anticipated to San José to a healthier economic future, however, some initial capital investment will be necessary. Renewable energy, recycled water and trails are noteworthy examples of areas needing significant upfront capital investment. Staff is continually exploring other financing mechanisms to supplement City dollars such as grants, public private partnerships, and assessment districts and has been successful in obtaining substantial grants for energy, trails, and transportation infrastructure in 2008.

- ***Forming strategic partnerships*** – In these tough economic times the importance of forming strategic partnerships cannot be over emphasized. As organizations strive to address the current economic challenges in an ever competitive global economy, doing more with less is critical to their survival. Adding to this are concerns about the sustainable future of the planet and the desire for many organizations to show themselves as responsible stewards of the environment. This creates the perfect opportunity for the City to seek out other entities such as schools, universities, non-profits and private corporations to work towards common goals by leveraging funds and resources. Significant progress on this front was made in 2008 with the public private partnerships pilot and Council adoption of the demonstration policy which encourages innovative pilot projects. These actions will enable staff to explore various partnership opportunities to further the Green Vision.

- ***Communications and engagement*** –. Communicating with key audiences to bring about awareness, acceptance and action on all of the goals is an important component to change behavior and ultimately ensure the success of all ten goals. In 2008, a Green Vision employee survey was conducted by executive management through the City's Art and Practice of Leadership program. A new Green Vision section for the City's Web site was created to track progress on goals and encourage community involvement. Community outreach focused on raising

awareness among residents and businesses, and promoting new energy-efficient and water-conserving behaviors. Advertising in the San Jose Mercury News, Metro and local community newspapers and outreach at community events took this message to thousands of people in our community in English, Spanish and Vietnamese. Environmental Services staff shared information about the Green Vision, and gave away compact fluorescent bulbs, water-saving aerators and/or reusable shopping bags at several large events including West Coast Green, Greenfair Silicon Valley, and Cisco's Earth Day event. A campaign targeted to Spanish speakers reached an audience of 40,000 people at the Festival Del Sol event, and included numerous radio ads. Information was also distributed at the Community Resource Fair and Earth Day at City Hall, reaching an estimated 6,000 Vietnamese speakers. Much progress was made on the other communications goal of promoting San José as the leading center for technical innovation and a model for fiscal sustainability and environmental stewardship.

## Strategic Focus for 2009

The 2009 focus areas for advancing the Green Vision are included in the table below, categorized by strategic areas:

### Leading by Example

| Strategic Focus | Proposed Strategy | 2009 Workplan |
|---|---|---|
| Identify space for local clean tech companies to manufacture in San José (Goal 1) | Work with key property owners and evaluate use of public lands for industrial development | Identify appropriate sites, including public land for 2M square feet of demand for manufacturing space |
| Implement energy efficiency projects in City facilities (Goal 2) | Partner with PG&E to conduct audits; Identify additional sources of funds for energy efficiency projects | Complete 20 energy audits and energy efficiency projects that save at least 20% one year after implementation |
| Install Solar on City Facilities (Goal 3) | Power Purchase Agreement RFP finalized and available for all City facility solar projects; remove barriers to solar installation for all City facilities | 1.5MW on City facilities (10MW by 2010) and draft City guidance document applicable to all City facilities to expedite installations |
| Implement Private Sector Policy for New Construction (Goal 4) | Receive CEC approval; develop deposit program; recommend ordinance adoption | Policy implementation effective August |
| Advance Commercial Waste Redesign (Goal 5) | Negotiate contracts that comply with City policy and provide cost-efficient services; identify sites for infrastructure | Design new commercial solid waste system; initiate procurement process for selecting new |

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| | | haulers/recyclers |
| Streamline Construction Demolition Diversion Deposit (CDDD) program (Goal 5) | Develop new program/reporting requirements for C&D facilities | Improve CDDD program, revamp to align with green building program |
| Eliminate litter to achieve Zero Waste (Goal 5) | Reduce use of disposable items | Develop policy to reduce litter |
| Expand uses of Recycled Water (Goal 6) | Re-evaluate and expand criteria for new developments in the vicinity of SBWR pipeline alignments | Adoption of an ordinance for new development |
| Reduce fuel consumption and GHG emissions (Goal 8) | Use higher fuel efficiency vehicles in public safety fleet | Pilot 10 Chevrolet Impalas in police patrol vehicle fleet |
| Reduce Citywide streetlight energy consumption (Goal 9) | Develop Lighting Master Plan with criteria for adaptive lighting and potentially cap energy use for public streetlights | Council adoption of Master Lighting Plan |
| Expand City's bike network (Goal 10) | Complete and implement Bike Plan Update | Bike Plan Update outreach and draft plan by March. Complete 5 miles of bike lanes. |

## Advocating Policies

| Strategic Focus | Proposed Strategy | 2009 Workplan |
|---|---|---|
| Develop policies to encourage expansion of existing, and development of new clean tech companies, and production and markets for clean tech products (Goal 1) | Expand Fed/State incentives to promote manufacturing and consumer adoption of California products | Pursue implementation of 2009 Clean Tech Legislative Agenda |
| Identify & remove barriers to creating energy improvement areas and smart grids (Goal 2) | Work with PG&E, California Energy Commission and CPUC to advance use of energy areas or smart grids | Explore potential for smart grid pilot within one or more areas of San Jose |
| Remove regulatory barriers to widespread adoption of solar (Goal 3) | Work with CPUC, utilities and others to establish fair, appropriate and reasonable tariffs to encourage expansion of solar | Implementation of AB2466<br><br>Pursue feed-in tariffs for solar |

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| Change State regulation to allow cost effective metering of individual lights (Goal 9) | Advocate CPUC regulatory changes | CPUC adoption of: tariffs for LED lights; evaluating technology that will enable billing based on real energy consumption |

## Financing Mechanisms

| Strategic Focus | Proposed Strategy | 2009 Goals |
|---|---|---|
| Support energy efficiency programs and retrofits (Goal 2) | Facilitate collaboration between various community providers to develop new and existing funding mechanisms for energy efficiency improvements | 20 nonprofits and other service agencies receive funding for energy efficiency improvements |
| Support solar programs for rental markets; and other innovative financing mechanisms (Goal 3) | Work with city departments, CPUC, PG&E, and CEC to implement solar programs for multi-family and low income residents; Develop integrated financing offerings for the community | Low-income and multifamily solar installations are increased by 15% |
| Pursue implementation of clean energy municipal financing for the community (Goal 3) | Participate in regional efforts and examine development of City-wide clean energy financing | Establish a model for clean energy municipal financing by December |
| Finance expanded recycled water infrastructure (Goal 6) | Development fee to support recycle water | Recommend Development Fee for Council Approval by June |
| Reduce green house gas emissions from fleet (Goal 8) | Utilize annual fleet replacement funding to replace fleet in accordance with the Green Fleet Policy. Identify additional funding needed for diesel emission retrofits; Pursue grant funding. | Reduce emissions at Airport with federal grant dollars such as with the Voluntary Airport Low Emission grant (VALE) |
| Identify funds for upgrade to smart, energy-efficient street lights (Goal 9) | Require energy efficiency lighting for new development; Identify Federal & City/SJRA funding sources | Install $500,000 worth of smart streetlights. Council adoption of private street lighting policy for new development |
| Fund expansion of trail network (Goal 10) | Work with regional, state, federal and private entities to secure funding and sponsorship. Freezing of State funds could become a critical issue if not resolved quickly | Seek funding for trails at the regional, state and federal level, with a target of $9.9 million annually, to stay on track for Green Vision goal |

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| Pursue funding from American Recovery and Reinvestment Act for Green Vision priorities (All Goals) | Identify key priorities funding and develop capacity to respond to funding opportunities | Secure funding in the areas of renewable energy installations, green mobility infrastructure, existing building renovation, and recycled water |

## Strategic Partnerships

| Strategic Focus | Proposed Strategy | 2009 Goals |
|---|---|---|
| Coordinate workforce development (Goal 1) | Develop cohesive regional strateg y to coordinate clean tech career training programs | Identify key partners, inventory activities, align efforts, and launch program |
| Expand knowledge and awareness of energy efficiency program resources (Goal 2) | Work in partnership with businesses, energy resource providers, Bay Area Air Quality Management Association, and organizations throughout community | 10% increase in number of San Jose residents and businesses receiving energy efficiency services |
| Develop waste to energy technology infrastructure at the City's Water Pollution Control Plant (WPCP) (Goal 5) | Collaborating with regional and state public partners as well as private planners and investors will provide the most efficient solution for waste diversion and energy production | Initiate process for procuring Waste to Energy (WTE) capacity on City owned land |
| Execute an agreement with the Santa Clara Valley Water District for long-term development of recycled water use (Goal 6) | Develop and analyze alternative modes of collaboration; facilitate meetings with elected officials to review and approve selected alternatives | Enter into a long-term agreement to expand uses of recycled water |
| Expand alternative fuel infrastructure (Goal 8) | Collaborate with other jurisdictions for regional compatibility | Develop regional standards and leverage procurement |
| Expand, maintain, and track new urban forest plantings through partnerships with residents and community groups (Goal 9) | Develop partnerships with California Climate Action Registry to explore carbon offset program and develop system to comprehensively track net new trees planted | Provide ongoing funding for City resources and to support partnerships. Expand tree planting program with the California Climate Action Registry and Our City Forest |
| Power existing streetlights with renewable energy (Goal 9) | Partner with private entities to develop cost-effective method to adapt existing streetlights to capture and use renewable energy | Identify potential partners to prototype system |

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| Expand and maintain trail network through partnerships (Goal 10) | Establish partnerships with non profits and private entities | Council adoption of volunteer policy. Increase number of trail miles adopted in Adopt-a-Trail program from 3.2 to 4.2 miles. Establish a Parks Foundation to support advocacy and fund raising for open space |

## Communications & Engagement

| Strategic Focus | Proposed Strategy | 2009 Workplan |
|---|---|---|
| Implement community-wide energy efficiency programs (Goal 2) | A Strategic Energy Plan (SEP) in coordination with community stakeholders—a long-term, integrated framework under which the San José community can use resources efficiently, create energy-efficient infrastructures, innovative technologies, clean tech jobs, and enhance the quality of life | Obtain Council approval of Strategic Energy Plan (SEP) by May.<br><br>Begin implementation of priority recommendations within SEP |
| Expand knowledge and awareness of renewable energy program resources (Goal 3) | Work in partnership with businesses and organizations throughout community | Increase awareness of San Jose residents and businesses about renewable energy with the goal of a 10% increase in number of San Jose residents and businesses receiving renewable energy services |
| Develop Green Building Policy for Existing Buildings (Goal 4) | Target green building policy outreach for existing buildings with a focus on environmental and economic benefits | Develop draft objectives and framework for policy by Summer, begin outreach efforts Fall |
| Expand markets for recycled water (Goal 6) | Increase outreach to potential customers; highlighting cost-savings by existing customers | Develop outreach pieces targeted to industrial customers; establish regular meetings to educate landscape customers on best practices |
| Gain public support for additional use recycled water (Goal 6) | Expand educational outreach to residents | Develop a public information campaign to increase public awareness of recycled water benefits |

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| Develop meaningful performance measures (Goal 7) | Focused civic engagement with Task Force and community to identify specific performance measures | Submit Land Use and Transportation scenarios to Council in April. Draft General Plan measures to be completed by late 2009 |
| Increase regional, national and global awareness of San José Green Vision (All Goals) | Promote San Jose as a leading center for technical innovation and a model for fiscal sustainability and environmental stewardship | Continue to secure placement of City success stories in regional and national media |
| Residential Outreach and Awareness (All Goals) | Leverage existing City efforts to conduct a residential awareness and public education campaign; Continue with community outreach effort | Develop a branding strategy including key messages to target residential behaviors around energy-efficiency and water-conservation |

# Green Vision Alignment with other Environmental Initiatives

*View of downtown San José from City Hall*

In conjunction with the ten Green Vision goals, the City of San José has committed to other environmental initiatives that will help San José become a nationwide leader in environmental sustainability, economic growth, and an improved quality of life for its residents. Described below are four environmental initiatives (the Bay Area Climate Change Compact, the Climate Action Plan, the U.S. Mayors' Climate Protection Agreement, and the Urban Environmental Accords) and a listing of how each align with the Green Vision strategy. In addition, the Green Vision strategy provides a roadmap to meet recent greenhouse gas emission (GHG) reduction targets under the follow State regulations:

- Assembly Bill (AB) 32 – California Global Warming Solutions Act
- AB 1493 – Vehicular Emissions: Greenhouse Gases
- State Bill (SB) 375 – Regional Transportation Planning, Housing, California Environmental Quality Act (CEQA) and Global Warming Emission Reduction
- SB 1771 – Greenhouse Gas Emission Reductions: Climate Change

## Urban Environmental Accords

On November 1, 2005, San José's City Council approved becoming a signatory to the Urban Environmental Accords (see Appendix). Developed as part of the 2005 United Nations Environment Day conference, the Accords consist of twenty-one "actions" designed to help cities worldwide move towards greater sustainability by addressing economic, environmental and social issues. The Accords address seven categories: Energy, Waste Reduction, Urban Design, Urban Nature, Transportation, Environmental Health, and Water. Over 100 cities worldwide have signed on to the Accords. To date, San José has accomplished twelve of the Actions and work is underway on all of them as continuous improvement is possible on those completed as well as those still in process.

## Bay Area Climate Change Compact

The Bay Area Climate Compact (see Appendix) consists of ten Bay Area- wide goals intended to reduce the Bay Area region's carbon emissions and create a green economy. The goals are consistent with the San José Green Vision. The Compact was written in conjunction with the cities of San Francisco and Oakland, the Silicon Valley Leadership Group, and several regional non-government organizations. This partnership has also led to a regional commitment to create an interlinked electric vehicle network. By partnering with other Bay Area cities, we are helping create a

market for electric vehicles and integrated charging station infrastructure that will connect our region in a sustainable way.

## The Climate Action Plan

The Climate Action Plan (CAP) is an inter-departmental effort to reduce San José's Green House Gas (GHG) emissions. The 2009 CAP focuses on municipal GHG reductions and will expand in the coming years to incorporate the community, as well as continually evolve to address the City's changing needs. This, and future CAPs, will be both supported by and coordinated with the Green Vision goals and the General Plan. The CAP and the corresponding database will serve as a tool for tracking and achieving the Green Vision goals, especially in reducing per capita energy use, producing renewable energy, expanding green building, achieving zero waste, creating a sustainable General Plan, and reducing wastewater. The combined efforts will result in significant measurable reductions in San Jose's carbon footprint.

The content of the CAP document will include: a description of the science behind climate change; a summary of the City's baselines GHG emissions (2003 municipal and 2005 community), including sector sources. City policies and activities that will reduce emissions are summarized and will be updated on a regular basis. Also included are the carbon equivalent of potential GHG reduction strategies and a yearly inventory of the City's GHG emissions. The first CAP draft will be made public in the spring of 2009.

## U.S. Conference of Mayors Climate Protection Agreement

On February 16, 2005, the international agreement to address climate disruption, the Kyoto Protocol, became law for the 141 countries that ratified it. Despite the Federal government's unwillingness to ratify the treaty, the U.S. Conference of Mayors launched the Mayors Climate Protection Agreement (see Appendix) to advance the goals of the Protocol through participating cities. According to the Agreement, participating cities agree to take following actions:

1. Strive to meet or beat the Kyoto Protocol targets in their own communities, through actions ranging from anti-sprawl land-use policies to urban forest restoration projects to public information campaigns

2. Urge their state governments, and the federal government, to enact policies and programs to meet or beat the greenhouse gas emission reduction target suggested for the United States in the Kyoto Protocol -- 7% reduction from 1990 levels by 2012

3. Urge the U.S. Congress to pass the bipartisan greenhouse gas reduction legislation, which would establish a national emission trading system

Although the Green Vision strategy exceeds all the targets of the Mayors Climate Protection Agreement, the Climate Protection Agreement does signify the willingness

of cities to unite and address climate change.

## Goal Alignment

The Urban Environmental Accords and the Bay Area Climate Change Compact have a number of action items that align with the broad topic areas of the Green Vision strategy. Below is a listing of how these two specific initiatives' action items align with the ten Green Vision goals:

**KEY**

- **BCC – Bay Area Climate Change Compact**
- **UEA – Urban Environmental Accords**

**Goal 1: Create 25,000 Clean Tech jobs by 2022:**

**BCC** Increase the available blue and white collar "clean and green workforce" course/trainings by the end of 2013 and helping place 20,000 trainees and graduates in the labor force by the end of 2013 (Action 5)

**UEA** Adopt a policy or implement a program that creates environmentally beneficial jobs in slums and/or low-income neighborhoods (Action 9)

**Goal 2: Reduce per capita energy use by 50 percent by 2022:**

**BCC** Through conservation and energy efficiency, reduce electrical energy usage in buildings from a 2008 baseline by an average of 10% by the end of 2013 and by 15% by the end of 2018 (Action 4)

**UEA** Adopt and implement a policy to reduce the city's peak electric load by ten per cent within seven years through energy efficiency, shifting the timing of energy demands, and conservation measures. (Action 2)

**Goal 3: Receive 100 percent of our electrical power from clean renewable sources by 2022:**

**BCC** From a 2008 baseline, increase by 30% the use of renewable sources for electrical energy by the end of 2013 and by 50% by the end of 2018 (Action 3)

**UEA** Adopt and implement a policy to increase the use of renewable energy to meet ten per cent of the city's peak electric load within seven years (Action 1)

**Goal 4: Build or retrofit 50 million square feet of green buildings by 2022:**

**BCC** Establish an example reference standard for "baseline" green building and rooftop solar practices by the end of 2010 (Action 1)

**UEA** Adopt a policy that mandates a green building rating system standard that applies to all new municipal buildings (Action 7)

Every year, identify one product, chemical, or compound that is used within the City that represents the greatest risk to human health and adopt a law and provide incentives to reduce or eliminate its use by the municipal government (Action 16)

**Goal 5: Divert 100 percent of waste from our landfill and convert waste to energy by 2022:**

**BCC** Increase solid waste diversion from landfills to 75% by the end of 2013, and achieve zero waste by the end of 2020 (Action 9)

**UEA** Establish a policy to achieve zero waste going to landfills and incinerators by 2040 (Action 4)

Adopt a citywide law that reduces the use of a disposable, toxic, or non-renewable product category by at least 50 percent in 7 years (Action 5)

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 (Action 6)

**Goal 6: Recycle or beneficially reuse 100 percent of our wastewater by 2022:**

**BCC** From a 2008 baseline, decrease community water consumption by 15% by the end of 2013 and 20% by the end of 2018 and increase water recycling rates by 10% by the end of 2013 and 15% by the end of 2018 (Action 6)

**UEA** Develop policies to increase access to adequate and safe drinking water aiming at access for all by 2015. For cities with potable water consumption greater than 100 liters per capita per day, adopt and implement policies to reduce consumption by 10% by 2015 (Action 19)

Protect the ecological integrity of the city's primary drinking water source (i.e. aquifers, rivers, lakes, wetlands and associated ecosystems) (Action 20)

Adopt municipal wastewater management guidelines and reduce the volume of untreated wastewater discharges by ten per cent 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 (Action 21)

**Goal 7: Adopt a General Plan with measurable standards for sustainable development by 2022:**

**BCC** Providing incentives and encouraging transportation mode-shifts, such as networked work locations, bicycling and public transit, to reduce 2008 baseline gasoline consumption 3% by the end of 2013, and 8% by the end of 2018 (Action 2)

Develop and adopt municipal and organizational climate adaptation plans by the end of 2013 to increase resiliency to the impacts of climate change (Action 7)

Implementing a common, ongoing region-wide public information campaign by the end of 2010, to reduce greenhouse gas emissions and increase community resiliency (Action 8)

**UEA** Adopt a citywide greenhouse gas reduction plan that reduces the jurisdiction's emissions by 25% by 2030 and which includes a system for accounting and auditing greenhouse gas emissions (Action 3)

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 (Action 8)

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 (Action 12)

Develop and implement a policy which expands affordable public transportation coverage to within half-a-kilometer of all city residents in ten years (Action 13)

Promote the public health and environmental benefits of supporting locally grown organic foods. Ensure that 20% of all city facilities (including schools) serve locally grown and organic food within seven years (Action 17)

**Goal 8: Ensure 100 percent of public fleet vehicles run on alternative fuels by 2022:**

**BCC** Increase the number of zero emission and other advanced ultra-low emission light duty vehicles to 10% of municipal and commercial fleets by the end of2013, and to 25% by the end of 2018 (Action 10)

**UEA** 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 advanced emission controls on all buses, taxis, and public fleets to reduce

particulate matter and smog-forming emissions from those fleets by 50 per cent in seven years (Action 14)

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" (Action 18)

**Goal 9: Plant 100,000 new trees and replace 100 percent of our streetlights with smart, zero-emissions lighting by 2022:**

**UEA** Conduct an inventory of existing canopy coverage in the city and then establish a goal based on ecological and community considerations to plant or maintain canopy coverage in not less than 50 per cent of all available sidewalk planting sites (Action 11)

**Goal 10: Create 100 miles of interconnected trails by 2022:**

**UEA** Ensure that there is an accessible public park or recreational open space within half-a-kilometer of every city resident by 2015 (Action 10)

Implement a policy to reduce the percentage of commute trips by single occupancy vehicles by 10% in seven years (Action 15)

# Goal 1: Create 25,000 Clean Tech Jobs as the World Center of Clean Tech Innovation

*Local Solar Photovoltaic Installation*

**Innovation** is the key to achieving nearly all of the Green Vision Goals. New technologies are needed to help the community reduce energy consumption; utilize renewable power; convert waste to energy; and adopt smart streetlights. As innovations are developed and clean technologies are utilized, San José and all of Silicon Valley will benefit from the emerging economic opportunities and a cleaner way to live, work and play. The strategic advantages of our region that have catalyzed previous waves of growth, such as a highly skilled workforce, world-class universities, entrepreneurial expertise, access to venture funding, and supportive government policies, will transform the current wave of clean technology innovation into a driving industry for generations to come.

Despite our region's competitive advantages, competition for clean tech jobs will be intense within the country and around the world, with many states and nations attempting to lure companies with multi-million dollar incentives. The existing strengths of Silicon Valley will attract the attention of prospective companies, but forward-thinking City policies, aggressive advocacy at the state and federal levels, effective use of limited resources, and a renewed focus on assisting companies at every stage of growth will be necessary to secure the headquarters of companies and to ensure long-term survival of the clean tech industry in San José.

**Priority Areas and Achievements:** To accomplish Goal #1, staff has developed a Clean Tech Strategy with specific elements to stimulate clean tech job growth, which includes:

- **Clean Tech Jobs:** The City's Clean Tech Strategy adopted to implement the Green Vision has produced substantial results, most significantly helping attract manufacturing jobs to San José. In October 2007, there were an estimated 1,500 Clean Tech jobs located in San José. Today, that number totals more than 3,000 with leading clean tech companies such as Phillips Lumileds, Echelon, SunPower, Stion, Solopower, Sopogy, BioFuelBox, Borgata Recycling, Solexant, SunWize, Sympagis and Fat Spaniel continuing to grow. Tesla Motors is evaluating various sites for the company's headquarters and drive train manufacturing facilities. In addition, leading thin-film solar companies such as Nanosolar and Solopower are producing solar cells in Edenvale. In addition to clean tech jobs, furthering the

Green Vision goals will also encourage the creation of green-collar jobs, for example jobs in the area of recycled water, waste to energy projects, and the building of green buildings and trails.

- **Incubation:** In addition to attracting and retaining leading companies, San José continues to offer world-class incubation services to the top clean tech companies of tomorrow. San José's Environmental Business Cluster (EBC) won the Business Incubation Association's 2008 Randall M. Whaley Incubator of the Year Award. The EBC has successfully helped more Clean Tech start-up companies commercialize their products than any other incubator in the nation. San José has also formed a strategic partnership with the California Clean Tech Open, an annual innovation competition among top entrepreneurs, to connect competition winners with free space in San José's incubator program.

*Local Thin-Film Solar Manufacturing*

- **World Center of Clean Tech Innovation:** Over the past year, San José has also emerged as a national model for growing the green economy. The Rockefeller Brothers' Fund, the Environmental Defense Fund, and International Economic Development Council recognized the Green Vision as a leading example of a Climate Prosperity Strategy of how communities can create opportunity while addressing climate change. Other key investments in 2008 include Underwriters Laboratory's (UL) decision to create their first solar testing/certification facility in North San José, SVTC Technology's creation of a solar development center in Edenvale, and SolarTech's location of its Center of Excellence in San José, co-located with work2future at 1290 Parkmoor Avenue.

## Strategic Framework

**Lead by Example:**

- Implementing Council-adopted Clean Tech Strategy
- Continually improve the special tenant improvement (STI) process. Recent discussions with Tesla and the UL Expansion
- Implementing Demonstration Policy. SJ Prize to Clean Tech Open winners (free incubator space/services)
- Developing Green Jobs Strategy. Developing Community Development Block Grant (CDBG) Clean & Green Jobs program (Work2future)

| | |
|---|---|
| **Advocate State and Federal Policies:**<br>▪ Successful advocacy of Federal renewable energy credits<br>▪ Supporting 2009 Clean Tech Legislative Summit (December)<br>▪ Clean Tech Legislative Agenda - advocating for additional commercialization funding<br>▪ Advocating for increased investment/coordination among workforce investment boards and community colleges | **Strategic Partnerships:**<br>▪ Industry: Silicon Valley Leadership Group/SolarTech, TechNet, Joint Venture<br>▪ Incubation: Environmental Business Cluster, BioCenter, Clean Tech Open, Department of Energy/ Sandia National Laboratories<br>▪ Workforce: work2future, labor unions, community colleges<br>▪ Brokers, venture capital, law firms |
| **Financing Mechanisms:**<br>▪ Using staff resources & San Jose Redevelopment Agency (SJRA) Clean Tech Jobs funds<br>▪ Leveraging of SJRA investment in incubators with general fund support for scholarships<br>▪ Utilizing Workforce Investment & Employment Training Panel Funds<br>▪ Community Development Block Grants | **Communication and Engagement:**<br>▪ Global Fluency - media coverage of attraction efforts<br>▪ Regional/national events to attract companies<br>▪ Key innovators/thought leaders<br>▪ Work2future Board of Directors and key stakeholders meeting |

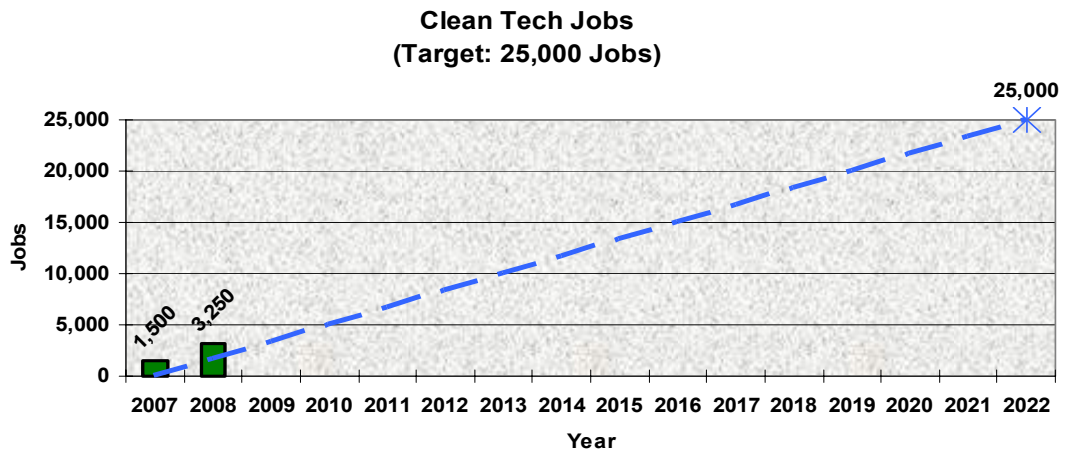
## Strategic Focus for 2009

| Strategic Area | Strategic Focus | Proposed Strategy | 2009 Workplan |
|---|---|---|---|
| Leading by Example | Identifying space for local clean tech companies to manufacture in San José | Working with key property owners and evaluating use of public lands for industrial development | Identify appropriate sites, including public land for 2M sq. ft. of demand for manufacturing space |
| Advocating Policies | Develop policies to encourage expansion of existing, and development of new clean tech companies, and production and markets for clean | Expand Fed/State incentives to promote manufacturing and consumer adoption of California products | Pursue implementation of 2009 Clean Tech Legislative Agenda |

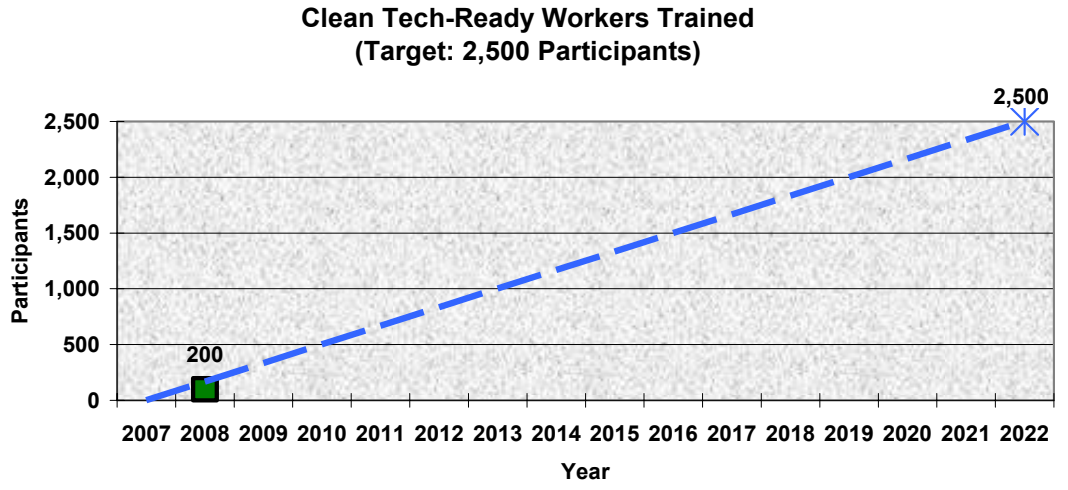
| | | | |
|---|---|---|---|
| | tech products | | |
| Strategic Partnerships | Coordinate workforce development | Develop regional strategy to coordinate clean tech career training programs | Identify key partners, inventory activities, align efforts, and launch program |

## Performance Measures

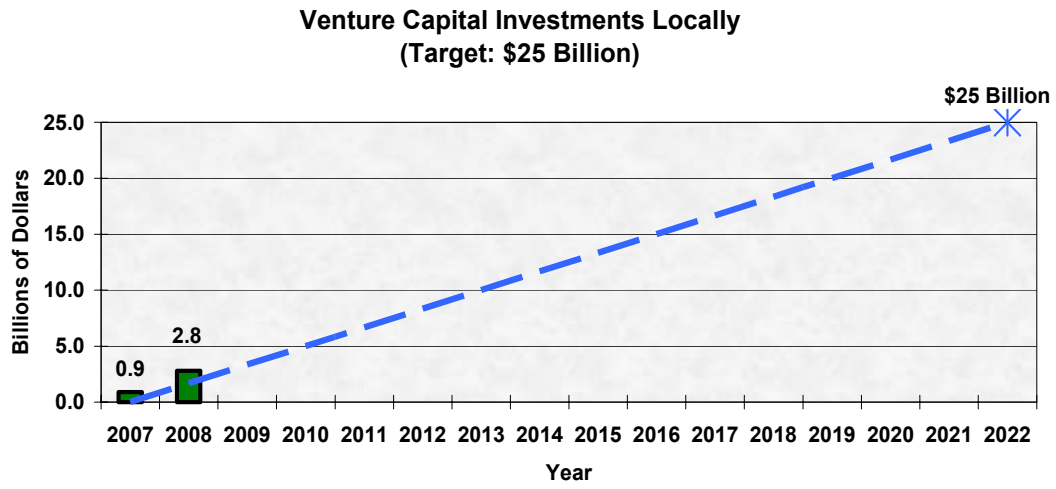
| Measure | Baseline 2007 | Current | Goal |
|---|---|---|---|
| Clean Tech Jobs | 1,500 | 3,250 | 25,000 jobs |



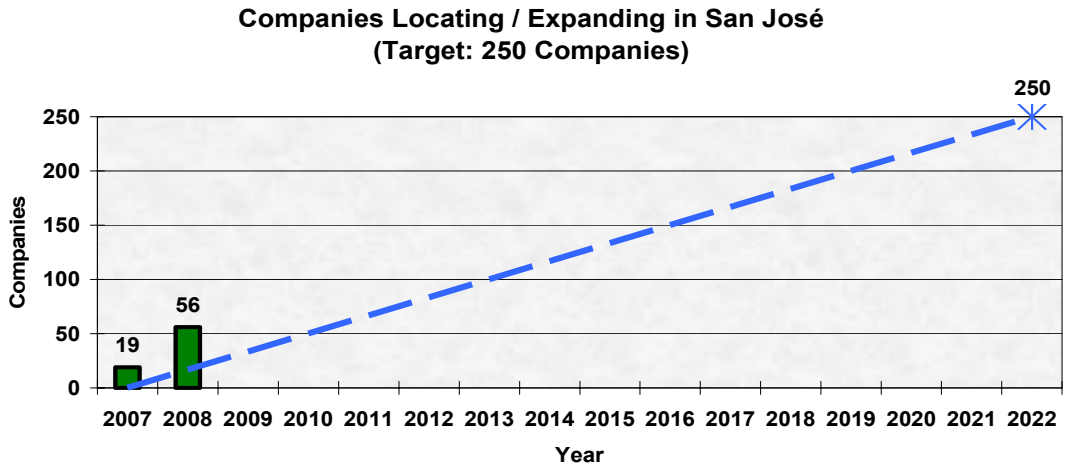

| Measure | Baseline 2007 | Current | Goal |
|---|---|---|---|
| Clean Tech-Ready Workers Trained | 0 | 200 | 2,500 participants |



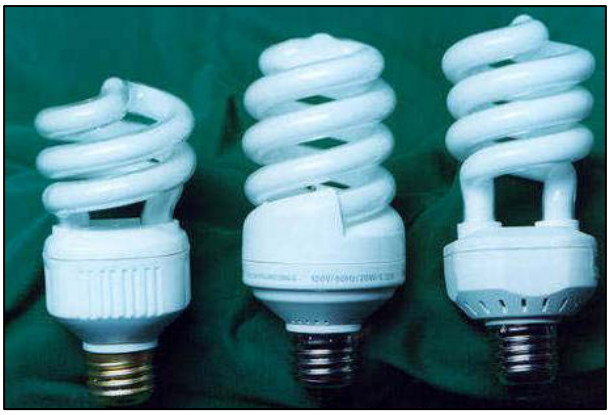
| Measure | Baseline 2007 | Current | Goal |
|---|---|---|---|
| Venture Capital Investments Locally | $0.9 | $2.8 | $25 billion |




| Measure | Baseline 2007 | Current | Goal |
|---|---|---|---|
| Companies Locating/ Expanding in San José | 19 | 56 | 250 companies |



# Goal 2: Reduce Per Capita Energy Use by 50%


*Compact Florescent Light Bulbs*

**As a global leader** in innovative technologies and policies, the state of California and the City of San José, in particular, have the opportunity to demonstrate to the world that communities and their economies can thrive while significantly reducing energy consumption. In the past three decades, electricity consumption per capita grew 60 percent in the rest of the nation, while it stayed flat in high-tech, fast-growing California. Both the state and the City have taken leadership roles in addressing climate change impacts through the adoption of aggressive greenhouse gas reduction goals. San Jose's goal to reduce per capita energy use opens the door to exciting new technologies, new efficiencies, early adoption of best practices and a heightened public awareness.

In September 2008, the California Public Utilities Commission (CPUC), with support from the Governor's Office, the California Energy Commission, the California Air Resource Board, the state's utilities, local government, and others, adopted the California Long-Term Energy Efficiency Strategic Plan. This Plan sets forth a statewide roadmap to maximize achievement of cost effective energy efficiency in California's electricity and natural gas sectors between 2009 and 2020, and beyond.

The City of San José's energy efficiency goals are aligned with the larger statewide goals and with the efforts of Pacific Gas and Electric (PG&E). In order to guide the actions for achieving these goals and envision our long-term goals, the City is developing a Strategic Energy Plan that will address the driving forces that currently challenge our ability to meet these goals, understand existing trends and opportunities, and provide the perspective and participation of key stakeholders throughout our community. Developing the City's overall energy vision and strategic action plan will go hand-in-hand with other City goals and objectives, such as economic development, job creation, and cultural values. The long-term framework of this Strategic Energy Plan will enable the San Jose community to use resources efficiently, create energy-efficient infrastructures, and protect and enhance quality of life.

**Priority Areas and Achievements:** To accomplish Goal #2, staff has developed an implementation plan that addresses both City operations and the community and includes the following:

- **Strategic Energy Plan:** The City is collaborating with numerous stakeholders,

including PG&E, Silicon Valley Leadership Group, Sierra Club's Cool Cities, and the Community/Envision 2040 Task Force, to develop the San José Strategic Energy Plan. Staff members are conducting interviews with stakeholders throughout the community to identify key issues and barriers, and partnership opportunities. Staff anticipates returning to Council with a draft plan in spring 2009. Initial areas of interest among the community relate to increased energy education, incentives, a focus on the "working poor" within San Jose, and linkages to the other Green Vision goals.

- **City Facility Energy Efficiency Improvements:** The City is implementing energy efficiency improvements through a variety of funding mechanisms including:

*Computer Power Management*

  - *The City Energy fund:* Using first year savings and rebates from completed energy efficiency projects to provide resources for additional energy projects, the City continues to reinvest in reducing energy costs. Energy efficiency projects implemented in 16 city buildings over the past year, are expected to save $435,000 in annual general fund energy costs and earn over $162,000 in rebates from PG&E. Based on these successes, staff estimates that $650,000 will be available in the energy fund for 2009-10 projects (staff and projects). Staff is planning to audit 20-30 additional facilities in 2009-10 and has already identified efficiency projects in five facilities that will cost $1.6M to implement but could save the General Fund an additional $718,000 per year and up to $600,000 in rebates.

  - *Community Development Block Grants:* The City received a $500,000 grant to implement energy, water efficiency, and other green building measures on ten city facilities (3 fire stations, 5 community centers, 2 libraries). The grant will also fund solar electric systems at 5 of the facilities and solar hot water in one fire station.

  - *Commercial paper.* Staff is currently analyzing the potential use of commercial paper and other financing mechanisms for additional City energy-saving projects. Staff is also working with PG&E to ensure comprehensive audits of City facilities with the largest energy use in order to have accurate data for development of the commercial paper proposal.

- **Community Energy Efficiency:** Efforts to educate and help the community continue with a series of partnerships including:

*Fire Station Energy Audit*

  - *2006-08 Silicon Valley Energy Watch with PG&E:* Using this grant, staff has made over 100 public presentations, staffed fairs and festivals, conducted library workshops and job training seminars and handed out over 10,000 compact florescent light bulbs in exchange for pledges to replace incandescent bulbs.

  - *2009-11 Local Government Partnership with PG&E:* Pending final approval by the California Public Utility Commission in late summer of 2009, this project will provide funding for outreach and direct installations of energy efficiency measures to small businesses, non-profits, low-income single and multi-family homes and City facilities from late 2009 to 2011.

## Strategic Framework

**Lead by Example:**
- Preparing the City's Strategic Energy Plan in collaboration with the community
- Implementing energy efficiency measures citywide

**Advocate State and Federal Policies:**
- Developing and promoting energy policy at Federal & State levels
- Implementing newly adopted legislation such as AB 2466
- Participating in California Public Utilities Commission and California Energy Commission proceedings and hearings, including development of the California Strategic Energy Efficiency Plan

**Strategic Partnerships:**
- Strategic Energy Plan Steering Group: PG&E, Silicon Valley Leadership Group, Solar Tech, Sierra Club's Cool Cities Campaign, neighborhood representatives
- Department of Energy/Sandia National Lab
- Association of Bay Area Governments
- Local Government Sustainable Energy Coalition (CA)
- Community and environmental organizations
- Energy efficiency installers
- Bay Area Air Quality Management District (BAAQMD)

| **Financing Mechanisms:** | **Communication and Engagement:** |
|---|---|
| ▪ Reinvesting first year savings and rebates<br>▪ Developing commercial paper for financing additional energy efficiency measures on city facilities<br>▪ Community Development Block Grants and other federal and state grant resources<br>▪ Expanding the PG&E Local Government Partnership to provide technical and financial resources to the community for energy efficiency | ▪ Interviews and discussions with key stakeholders<br>▪ Refine and finalize the Strategic Energy Plan for Council adoption in late spring 2009<br>▪ City department collaboration and employee engagement<br>▪ Raising public awareness through presentations, events and energy efficiency give-away items (e.g., Silicon Valley Energy Watch program) |

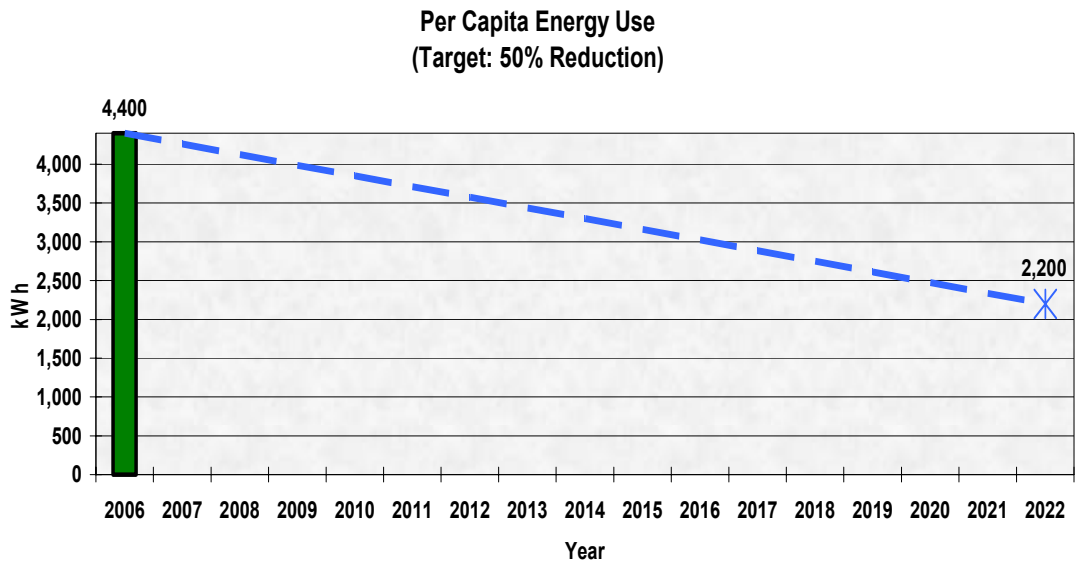
## Strategic Focus for 2009

| Strategic Area | Strategic Focus | Proposed Strategy | 2009 Workplan |
|---|---|---|---|
| Leading by Example | Implement energy efficiency projects in City facilities | Partner with PG&E to conduct audits; identify additional sources of funds for energy efficiency projects | Complete 20 energy audits and energy efficiency projects that save at least 20% one year after implementation |
| Advocating Policies | Identify & remove barriers to creating energy improvement areas and smart grids | Work with PG&E, California Energy Commission and CPUC to advance use of energy areas or smart grids | Explore potential for smart grid pilot within one or more areas of San Jose |
| Financing Mechanisms | Support energy efficiency programs and retrofits | Facilitate collaboration between various community providers to develop new and existing funding mechanisms for energy efficiency improvements | 20 nonprofits and other service agencies receive funding for energy efficiency improvements |
| Strategic Partnerships | Expand knowledge and awareness of energy efficiency | Work in partnership with businesses, energy resource | 10% increase in number of San Jose residents and |

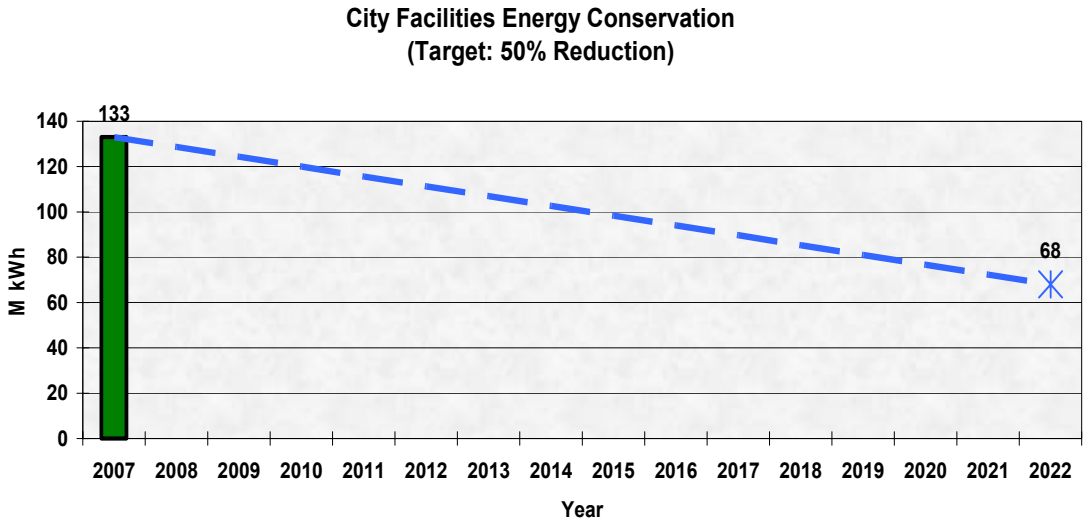
| | | | |
|---|---|---|---|
| | program resources | providers, Bay Area Air Quality Management Association, and organizations throughout community | businesses receiving energy efficiency services |
| Communications and Engagement | Implement community-wide energy efficiency programs | Develop a Strategic Energy Plan (SEP) in coordination with community stakeholders. | Obtain Council approval of SEP by May 2009.<br><br>Begin implementation of priority recommendations within SEP. |

## Performance Measures

| Measure | Baseline2006 | Current | Goal |
|---|---|---|---|
| Per Capita Energy use | 4,400 | Awaiting final 2007 data from PG&E | 2,200 kWh/year |



| Measure | Baseline 2007 | Current | Total |
|---|---|---|---|
| City Facilities Energy Conservation | 133 | Awaiting final 2008 data from PG&E | 68 M kWh/year |



# Goal 3: Receive 100% of Our Electrical Power from Clean, Renewable Sources

**Eliminating dependence** on electricity generated from fossil fuels is the third Green Vision Goal, applying to both City government and the entire San José community. The liabilities of fossil fuel usage are increasingly plain: future scarcity or restrictions in supply may cause them to be too expensive or unreliable; combustion of fossil fuels creates air pollutants that can harm public health; and resulting carbon dioxide emissions are likely to increase future operating costs through a tax or other financial liability. In contrast, pursuing electrical power from clean, renewable sources is projected to reduce harmful air pollutants, long-term operating costs, and carbon emissions for the entire community.

*Solar Panels on San José Tech Museum of Innovation*

This goal builds upon the leadership demonstrated by the State of California. The State has adopted the most aggressive renewable portfolio standard in the nation, with the recent Executive Order from the Governor Schwarzenegger that raises California's renewable energy goals to 33 percent by 2020. Obtaining 100% of San José's electrical power from clean, renewable sources such as wind, solar, geothermal, biomass, landfill gas, municipal solid waste and small hydroelectric facilities will require the formation of strong partnerships; development and piloting of new, clean technologies; and inspiring widespread adoption. Measuring the achievement of this goal will entail a variety of methods to account for the existing renewables generated within the City limits, recognizing the contribution of PG&E's renewable portfolio, and the potential for additional generation outside of the city limits.

**Priority Areas and Achievements:** Staff proposes a phased approach to the work plan for Goal #3. Near-term actions include encouraging more deployment of solar energy within the City and piloting waste to energy programs. Longer-horizon actions will be based on pilot project results and emerging technologies. Staff will continue focusing on the three key areas as reported below.

- **Solar on City Facilities:**
  - Facilitated the installation of 185 kW of solar on Tech Museum
  - Finalizing a Request for Proposals( RFP) and Power Purchase Agreement (PPA) template for use at all City facilities appropriate for solar installations. Anticipate release of the RFP for up to 1.5MW installations on two City service

yards in early 2009

- Assessing other facilities for solar installations based on their current energy efficiency status, ownership, and restrictions from tax exempt funding

- Utilizing part of the Community Development Block grant (CDBG) to install solar photo voltaic (PV) power on three community centers and a library and a solar PV and hot water system at Fire Station #1

**Solar Community Installations:** In the past year, there have been significant investments in solar throughout San José including Macy's (307 kW), eBay (650 kW), San Jose Unified School District (5 Megawatts (MW) on many facilities throughout San Jose), Star Quality Concrete facility (410 kW), and the Target Store (380 kW). A recent report from the Northern California Solar Energy Association ranks San José 1st for total solar projects (723) since 1998 for large cities with populations over 100,000. A comprehensive data base of solar projects in San José is being compiled and will be updated and maintained.

*San José Tech Museum of Innovation Solar System*

- **Legislative Achievements:** Two key pieces of signed legislation likely to significantly spur solar investment are:

  - *Assembly Bill (AB) 2466:* City staff worked closely with Assemblyman Laird to co-sponsor AB 2466 which allows local governments to receive a financial credit on their overall energy bills for up to 1 MW of excess energy produced per municipal solar installation. AB 2466 was signed into law in September 2008 and took effect January 1, 2009.

  - *Renewal of Solar Investment Tax Credit:* The solar investment tax credit was approved as part of the financial bailout package. One key provision increased the residential credit to 30% of the cost of installation, eliminating the $2000 cap for another eight years.

## Strategic Framework

**Lead by Example:**

- Preparing the City's Strategic Energy Plan in collaboration with the community
- Installing solar on city facilities
- Finalizing RFPs for installation of solar electric and hot water systems at City facilities
- Providing trainings, seminars and demonstration sites to ensure that San Jose

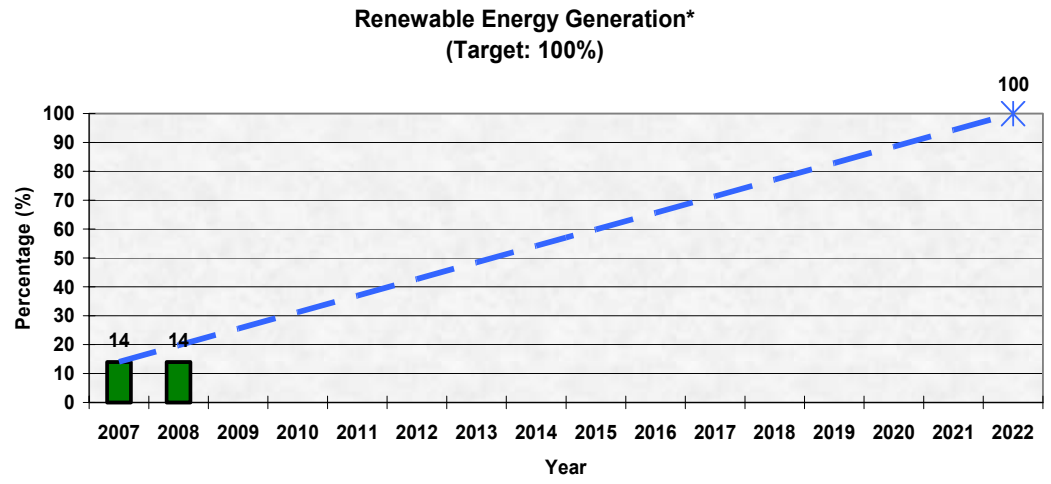
| residents and business are aware of opportunities for solar installation | |
|---|---|
| **Advocate State and Federal Policies:**<br>▪ Developing and promoting energy policy at Federal & State levels;<br>▪ Implementing legislation such as AB 2466—the local government renewable energy self generation program that was signed by the governor; participating in California Public Utilities Commission & California Energy Commission (CEC) proceedings and hearings, including working to finalizing tariffs and procedures with the California Public Utilities Commission | **Strategic Partnerships:**<br>▪ U.S. Department of Energy/Sandia National Lab<br>▪ Solar Tech<br>▪ PG&E<br>▪ California Public Utilities Commission<br>▪ CEC<br>▪ California Solar Energy Industries Association<br>▪ Home Builders (for the California Solar Home Program)<br>▪ Solar Developers, small businesses, manufacturers and integrators<br>▪ California Integrated Waste Management Board & Waste to energy firms |
| **Financing Mechanisms:**<br>▪ Analyzing all opportunities for city solar installations, including purchase, power purchase agreements, grants, donations<br>▪ Mayor's Solar Challenge to solar providers to develop no money down financing options<br>▪ Renewal of the federal investment tax credit<br>▪ Identifying and developing other financial mechanisms for community solar installations, such as use of property tax assessments & neighborhood solar sites<br>▪ Host fees for waste to energy facilities<br>▪ Grant award from the Department of Energy for the City's Solar America City Program | **Communication and Engagement:**<br>▪ Interviews and discussions with key stakeholders throughout the community (December 2008 and January 2009), to refine and finalize the Strategic Energy Plan for Council adoption in spring 2009<br>▪ The City's Interdepartmental Energy and Solar Team to ensure coordination on city installations and educational activities<br>▪ Community-wide communications and education plan as part of the Department of Energy (DOE) Solar America City initiative to ensure awareness of renewable energy opportunities; working with nonprofits, businesses & educational institutions |

## Strategic Focus for 2009

| Strategic Area | Strategic Focus | Proposed Strategy | 2009 Workplan |
|---|---|---|---|
| Lead by Example | Install Solar on City Facilities | Power Purchase Agreement RFP finalized and available for all City facility solar projects; remove barriers to solar installation for all City facilities | 1.5MW on City facilities (10MW by 2010) and draft City guidance document applicable to all City facilities to expedite installations |
| Advocating Policies | Remove regulatory barriers to widespread adoption of solar | Work with CPUC, utilities and others to establish fair, appropriate and reasonable tariffs to encourage expansion of solar | Implementation of AB2466<br><br>Pursue feed-in tariffs for solar |
| Financing Mechanisms | Support solar programs for rental markets; and other innovative financing mechanisms | Work with city departments, CPUC, PG&E, and CEC to implement solar programs for multi-family and low income residents; Develop integrated financing offerings for the community | Low-income and multifamily solar installations are increased by 15% |
| Financing Mechanisms | Pursue implementation of clean energy municipal financing for the community | Participate in regional efforts and examine development of City-wide clean energy financing | Establish a model for clean energy municipal financing by December |
| Communications and Engagement | Expand knowledge and awareness of renewable energy program resources | Work in partnership with businesses and organizations throughout community | Increase awareness of San Jose residents and businesses about renewable energy with the goal of a 10% increase in number of San Jose residents and businesses receiving renewable energy services |

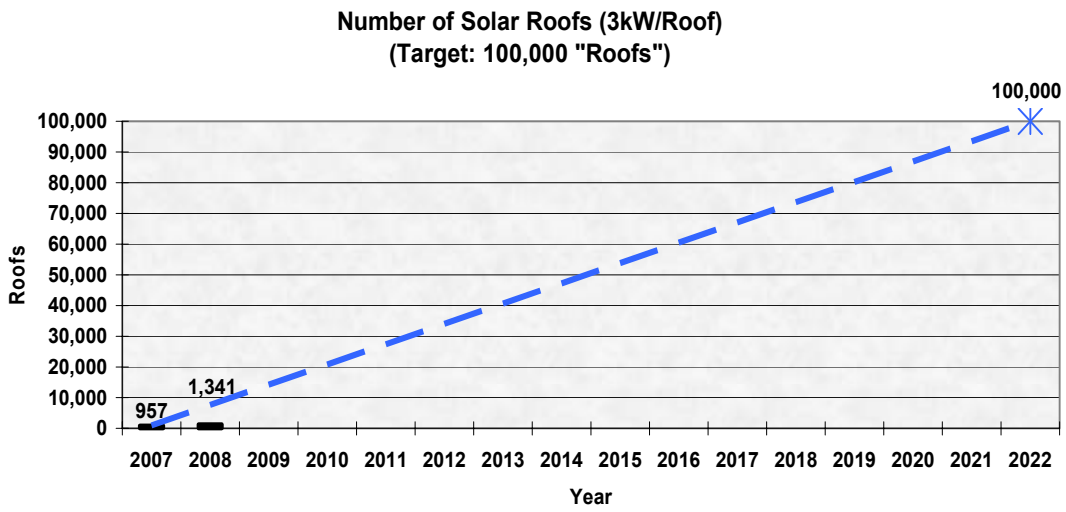
# Performance Measures

| Measure | Baseline 2007 | Current | Goal |
|---|---|---|---|
| Renewable Energy Generation | 14%* | 14% | 100% |



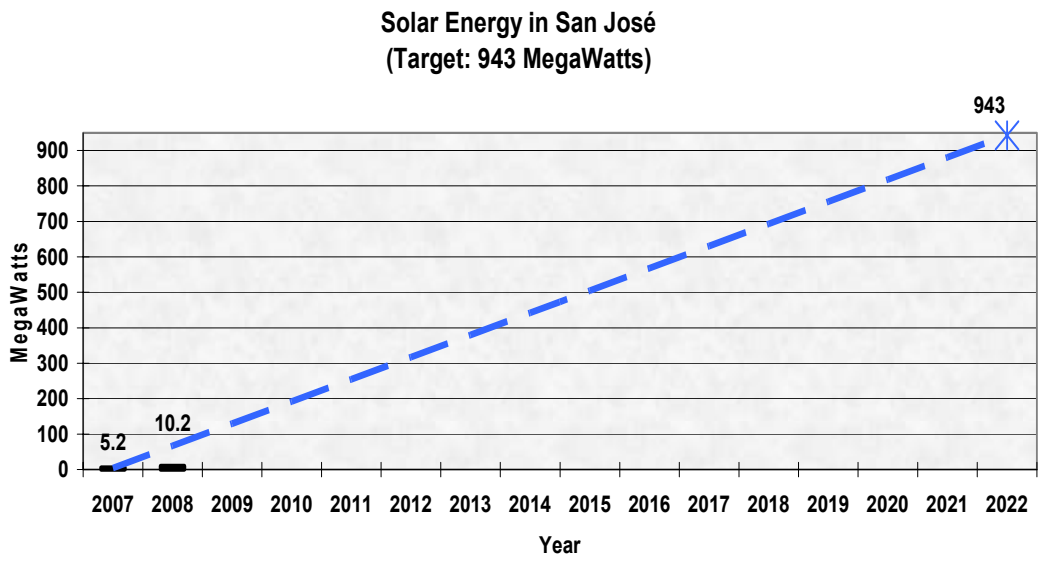

*Percentage of energy in PG&E's portfolio generated by renewables.

| Measure | Baseline 2007 | Current | Goal |
|---|---|---|---|
| Number of Solar Roofs ( 3kW /roof) | 957* | 1,341 | 100,000 "roofs" |




*Cumulative 1998-2007

| Measure | Baseline 2007 | Current | Total |
|---|---|---|---|
| Solar energy in San José | 5.2 | 10.2 | 943 MW* |




*solar is projected to account for of 50% of total energy used in San José

# Goal 4: Build or Retrofit 50 Million Square Feet of Green Buildings

*West Valley Library*

**By setting higher standards,** San José has consistently shown national leadership by first adopting a Green Building policy in 2001 and then amending it in March 2007 to set even higher standards for all City and Redevelopment Agency buildings. While the policy sets clear goals and requirements for new construction of City facilities over 10,000 square feet as well as major renovation of existing buildings, City facilities alone will only account for about 5% of the Green Vision goal of building or retrofitting 50 million square feet of green buildings. Thus, the "greening" of buildings in the private sector is a key element in the success of this goal. In October 2008, Council adopted the first phase of a private sector green building policy for new construction. Currently San José has about 1.33 million square feet of public and private green building space with another 13.88 million square feet of green space in design or construction (including public and private).

**Priority Areas and Achievements:** Several efforts are underway to increase the square footage of certified green building space in San José. The Green Vision framework for green buildings is built around 2 key areas:

- **City Facilities:**
  - *New Construction:* Two City Facilities, Central Service Yard and Fire Station No. 35, received Leadership in Energy and Environmental Design (LEED) Silver certification in 2008. We now have about 147,600 square feet of LEED certified new City Facilities. Seventeen new City facilities are in various phases of design and construction with certification for Camden Community Center, Starbird Youth Center, Roosevelt Community Center and Mayfair Community Center expected over the next few months.
  - *Existing Buildings:* San José is working with U.S. Green Building Council (USGBC) on a portfolio program which will allow the City to streamline certification of existing City facilities based on operational consistency and standards. We have submitted LEED documentation for City Hall and anticipate certification within the next few months. The process to certify four additional City facilities has begun and certification of other existing facilities will proceed as funding becomes available.

- **Private Sector:**

  - *Private Sector Green Building Policy:* San José continues to show leadership in the area of green building with its adoption of the first phase of a green building policy for new private sector construction in October 2008. This policy mandates levels of LEED or Green Point Rated certification for certain sizes and types of construction and requires submittal of a green building checklist for all other new construction to increase public awareness of green building practices. Staff is currently drafting a corresponding ordinance to bring forward to Council in early 2009.

    Stakeholder outreach for Phase II of the private sector green building policy, which will address retrofits and rehabilitation projects, will begin in summer 2009 with a policy anticipated to come forward for Council consideration in 2010. In the context of the current economic climate, an important consideration while drafting the framework for this policy, will be the economic benefits related to operational & maintenance cost savings resulting from the greening of existing buildings. As both Phases of this policy become effective, and the economy improves, staff anticipates making substantial progress on this goal. The State Building Code has issued voluntary standards for green buildings, some of which are expected to become mandatory in 2009. Staff is actively engaged and closely monitoring developments on this front.

*Adobe Headquarters Downtown San José*

Recent successes in the private sector include: EBay's certification of a LEED office tower, AMB's TriPoint Project in North San José, BD Bio-Science, Summerhill Homes, and Gish Apartments—the first multi-family housing project in the nation to receive LEED Gold certification.

## Strategic Framework

**Lead by Example:**
Updated Municipal Green Building policy adopted in March 2007. Green Building Steering Committee provides oversight on all City facilities. Adoption of Phase I Private Sector Green Building Policy for new construction in October 2008. PBCE staff trained to support the Green Building Policy; however, the February 2009 layoffs of staff supporting the planning and building programs will result in a decrease of four staff trained to implement the LEED and Build it Green standards, a reduction in 24 %

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| of the department's trained capacity. The reduction in trained staff will make implementation of the Private Sector Green Building Policy much more challenging until training funds are available and additional staff are trained. In the near-term future, PBCE will have minimal capacity to offer an in-City method of verifying compliance to the Green Building Policy as an alternative to verification performed by LEED or Build it Green. PBCE is investigating fiscal mechanisms to provide an in-City alternative to LEED or Build it Green verification, for which costs to the City would be fully recovered. | |
| **Advocate State and Federal Policies:**<br>▪ Advocacy with Santa Clara County Cities Association and Joint Venture Silicon Valley's Sustainable Building Initiative to ensure regional consistency<br>▪ Help guide mandatory State Building Code standards | **Strategic Partnerships:**<br>▪ Participate in USGBC's Portfolio Program for existing facilities<br>▪ Develop partnerships with USGBC and Build It Green to ensure timely and responsive support for certification of buildings in San José |
| **Financing Mechanisms:**<br>▪ Use of existing capital funding for municipal new construction<br>▪ Savings from energy efficiency projects to fund improvements and upgrades at additional buildings<br>▪ Facilitate access to information regarding free technical assistance and rebates to help offset green building costs | **Communication and Engagement:**<br>▪ Using communication about certified municipal facilities to educate, promote and engage the community on the benefits of green buildings<br>▪ Using websites (Planning, Building and Code Enforcement (PBCE), Environmental Services Department (ESD)) to share technical knowledge and resources<br>▪ Conducting stakeholder outreach for the Phase II private sector green building policy<br>▪ Developing green building informational material for the community |

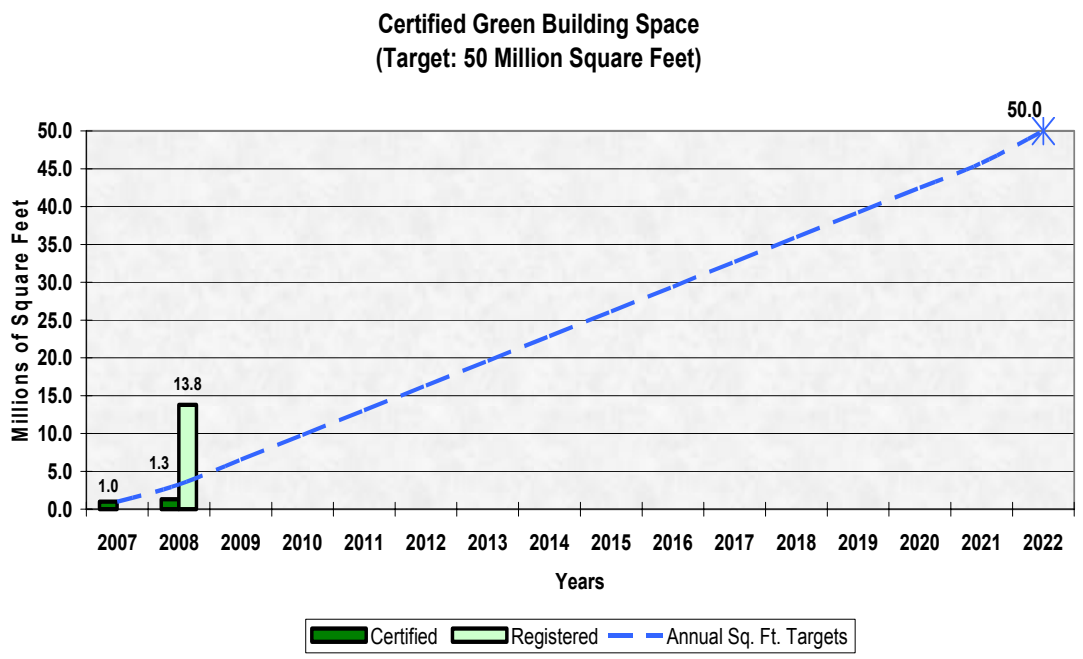
## Strategic Focus for 2009

| Strategic Area | Strategic Focus | Proposed Strategy | 2009 Workplan |
|---|---|---|---|
| Leading by Example | Implement Private Sector Policy for New Construction | Receive California Energy Commission (CEC) approval; develop deposit program; recommend | Policy implementation effective August |

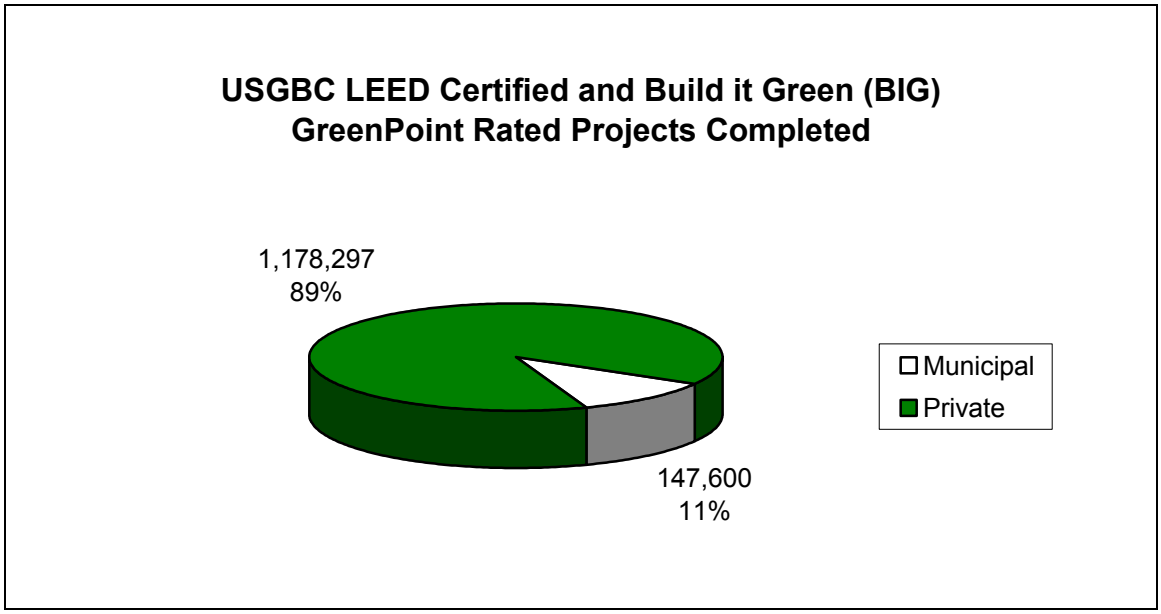
| | | | |
|---|---|---|---|
| | | ordinance adoption | |
| Communications & Engagement | Develop Green Building Policy for Existing Buildings | Target green building policy outreach for existing buildings with a focus on environmental and economic benefits | Develop draft objectives and framework for policy by Summer, begin outreach efforts Fall |

## Performance Measures

| Measure | Baseline 2007 | Current | Goal |
|---|---|---|---|
| Certified Green Buildings | 1 million | 1.3 million | 50 million square feet |




* Over 13 million square feet of buildings are currently registered to obtain certification



*Central Service Yard – LEED Gold*

*Gish Apartments – LEED Gold*

*Fire Station 35 – LEED Silver*

# Goal 5: Divert 100% of Waste from Landfill and Convert Waste to Energy

*New San José Recycling and Composting Containers*

**Creating infrastructure** and programs to achieve Zero Waste by 2022 is a challenge we face in the coming decade. By increasing the amount of material recycled and composted and utilizing as much of the rest as possible to create clean, reliable energy, the City can achieve multiple objectives. These include reducing environmental impacts, creating local jobs, driving implementation of new technologies, and creating a local, reliable, environmentally sound energy source. Processing materials that currently end up in landfills would create an estimated 500 jobs or more in San José. This number would grow exponentially if the manufacturing of new products were also local.

If San José and other local cities do not reduce waste over the next 15 years, solid waste landfill space in the region could reach capacity. Overall, landfills are becoming increasingly difficult to site in California, volatile fuel prices and concerns about greenhouse gas emissions make it very costly to transport waste to distant out of state disposal sites.

**Priority Areas and Achievements:** Although the City has one of the highest waste diversion rates of any large city in the nation, many waste reduction opportunities remain. California's waste diversion mandate is based on achieving a set "diversion rate" and requires tracking individual materials that are reused and recycled from the multitude of waste generators in the City; however Goal 5 of the Green Vision directs staff to focus on reducing the amount of actual tons going to landfills. Staff will focus its efforts on the four principal waste streams: single-family residences; multi-family residences; construction and demolition activity; and commercial/industrial/institutional waste generators (including large public events and City facilities/operations). In December 2008, the California Air Resources Board adopted the Assembly Bill (AB) 32 Scoping Plan which includes mandatory commercial recycling throughout the state and encourages diversion of organics from landfills through composting and anaerobic digestion. In order to meet Goal 5, staff is focusing on the following five key priority areas:

- **Zero Waste Strategic Plan and Water Pollution Control Plant (WPCP) Master Plan:** The Zero Waste Strategic Plan presented to Council on December 16, 2008, represents the first major assessment and comprehensive overview of the City's Integrated Waste Management system since 1991 when the City created its Source Reduction and Recycling Element as required by the California Integrated Waste Management Act of 1989 (AB939). The Plan is a dynamic document and the current version captures the best information available to date on waste generation, solid waste facilities, waste processing technologies, and approaches for increased diversion. including consideration of a food waste digestion pilot at the WPCP. The Plan and special topic appendices can be found at http://www.sjrecycles.org/zerowaste.asp

  The Zero Waste Strategic Plan includes the following key strategies for implementation: Extended producer responsibility (EPR) which is a strategy designed to promote the integration of environmental costs associated with products throughout their life cycles into the market price of the products, environmentally preferable procurement, landfill regulations, generator mandates, reducing single-use packaging, lower carbon emissions, recycling market development zones, green jobs creation, financial and funding policies, implementation of a food waste digestion pilot, and energy conversion technologies such as gasification, incineration and pelletizing for refuse-derived fuel.

*Composting at Newby Island*

- **Residential Recycling:** Recent improvements to recycling at apartments and condominiums have resulted in the highest-performing multi-family recycling program in the United States. The program also created more than 70 new jobs in San José. These improvements have resulted in over 75% of multi-family waste being diverted from local area landfills. Staff will be evaluating pilot programs to compare collection and processing methods, including the collection and composting of residential food waste. An extensive outreach campaign will be developed to reduce the amount of trash that cannot be recycled, also referred to as "contamination" in the recycling carts. Enforcement and incentive programs, such as increased education and higher fines for a contaminated recycling cart, may be implemented to encourage proper recycling.

- **Commercial Solid Waste System Redesign:** Council is considering the redesign of the commercial garbage and recycling collection program to a multi-district exclusive system. Full implementation will occur in 2012 if staff recommendations are adopted. Staff is completing the evaluation of proposed collection districts, finalizing categories of materials to be included in the new system, and anticipates releasing a Request for Proposals (RFP) in late spring

2009. Redesigning the commercial system will be required to achieve the City's 75% waste diversion goal. The redesign also supports Green Vision Goals 1 & 3.

- **Construction & Demolition Recycling Evaluation:** In July 2008, staff began an effort to evaluate the City's successful Construction Demolition Diversion Deposit (CDDD) Program to identify potential improvements for achieving greater diversion levels, supporting waste to energy goals, and aligning diversion requirements with Green Building LEED requirements. It is anticipated that evaluation of the CDDD Program will be completed in June 2009, with recommended changes presented to Council in fall 2009.

- **City Facilities, Events, and Venues Recycling:** Recent improvements to recycling at City facilities, including sorting of all waste at an off-site facility has achieved a 75% recycling rate for all operations, including the Airport, Convention Center, libraries, and City Hall. Staff worked with event organizers to divert up to 93% of waste from the five largest events in San José. City staff also partnered with the Children's Discovery Museum to implement an expanded public recycling program as well as a Zero Waste program for the Kid's Café within the museum. The program provided an exciting education opportunity for children visiting the museum.

## Alignment with Complementary Environmental Initiatives:

In conjunction with Goal 5, the City of San José has committed to four other environmental initiatives related to waste, described below, and how each aligns with our Green Vision strategy.

- **Green Cities California Resolution**
  City staff, along with representatives from 10 other major California cites, met in May 2006 to discuss leveraging their combined experience, influence, and sustainability goals to advocate for collective, urban, environmental action. In June 2008, the City formally adopted the Green Cities California Resolution, pledging to collaborate with local governments throughout the nation to adopt sustainable policies and practices. One outcome was Council's adoption of a ban on using City funds to purchase bottled water. Reducing the use of single serve containers will help to reduce litter and the disposal of these items.

- **Cities Keep It Clean Partnership**
  In September 2008, San José was the first city in the Bay Area to join the Cities Keep It Clean Partnership. San José committed to protect the San Francisco Bay from: trash, mercury, e-waste, pharmaceuticals, pesticides, vehicle pollution, and runoff.

- **Bay Friendly Gardening Coalition**
  San José is a charter member of this coalition and is spearheading efforts to

bring the program to Santa Clara County. The Bay Friendly Gardening Program promotes sustainable gardening and landscaping practices that help reduce waste, conserve energy, save water, prevent pollution, and protect local habitat. Waste is reduced by planting and watering for the least amount of green waste production, as well as onsite compost production. Replacing fertilizers and chemicals with compost preserves the environment and promotes marketing of the compost produced from green waste collected.

- **Environmentally Preferable Procurement Policy**
  In 2001, the City adopted the Environmentally Preferable Procurement Policy (EP3) to use environmentally preferable goods and services where possible to demonstrate leadership and help move the market toward more environmentally sound commerce. The purchase of these goods helps to drive markets for materials like recycled paper and other products that could otherwise go to a landfill. In 2007, the City joined the Responsible Purchasing Network (RPN), an international network of buyers dedicated to socially responsible and environmentally sustainable purchasing. This organization offers information and training in Environmentally Preferable Procurement (EPP).

## Strategic Framework

**Lead by Example:**

- Water Pollution Control Plant runs on Newby Island Landfill methane gas
- Zero Waste 2009 Workplan adopted by Council in December 2008
- Sorting garbage for recyclables and capturing food waste from multi-family buildings and City operations
- Researching food waste recycling from single-family homes
- Eliminating litter & recyclable contamination
- Redesigning the commercial garbage and recycling collection system
- Achieving increased diversion for Construction and Demolition (C&D) waste for City public works projects (C&D accounts for 30% of the City's disposed waste stream)
- Evaluating Construction/ Demolition Diversion Deposit Program
- Achieving up to 93% waste diversion for the five largest events in San Jose implementing recycling programs in key City venues (e.g., Convention Center, Children's Discovery Museum)
- Support State legislation to increase funding to create adequate infrastructure for organics

| **Advocate State and Federal Policies:** | **Financing Mechanisms:** |
|---|---|
| ▪ Providing key support for County-wide efforts to reduce use of single use carryout bags<br>▪ Participate in International Climate Registry development of protocols | ▪ Evaluate various fee options<br>➢ San Jose Solid Waste Facility host fees<br>➢ Public/private partnerships<br>➢ Grants |

| | |
|---|---|
| for carbon emissions<br>Facilitate creation of recycling infrastructure, i.e. for organics, including funding & regulations<br>▪ Participate in implementation of California Air Resources Board AB 32 Scoping Plan, including mandatory commercial recycling and diversion of organics from landfills | ➢ Potential future sale of carbon offset credits<br>➢ Customer rates<br>➢ Unclaimed CDDD deposits<br>➢ Evaluate changing basis for charging Commercial Solid Waste Franchise Fee and Disposal Facility Tax |
| ▪ City sponsored SB1357 that allows up to $20M to be expended on beverage container recycling and litter reduction programs. | <br>*School Recycling Efforts* |
| **Strategic Partnerships:**<br>▪ Residents: Tri-County Apartment Association, Strong Neighborhoods Initiative (SNI) groups, neighborhood & community groups<br>▪ Recyclers, waste haulers, & professional organizations (California Product Stewardship Council, Californians Against Waste)<br>▪ Government Agencies: California Integrated Waste Management Board, County, other local governments, & schools and universities Waste to Energy (WTE) Firms Treatment Plant tributary agencies &utilities (San Francisco Public Utilities Commission (SF PUC) & East Bay Municipal Utility District (EB MUD))<br>▪ Chambers of commerce, Silicon Valley Leadership Group, | **Communication and Engagement:**<br>▪ Developing and implementing communications strategies for each section of the Zero Waste Strategic Plan<br>▪ Released Energy Conversion Request for Information (RFI) in late 2007; begin drafting RFP<br>▪ Meeting with energy conversion industry to get input on technologies<br>▪ Create and distribute Residential Recycling Guide<br>▪ Waste reduction education campaigns in partnership with haulers and other local governments; includes campaign to reduce single-use carryout bags<br>▪ Extensive stakeholder outreach to solicit input on new commercial system (e.g., electronic survey, advertising, presentations, direct mail)<br>▪ CDDD program literature |

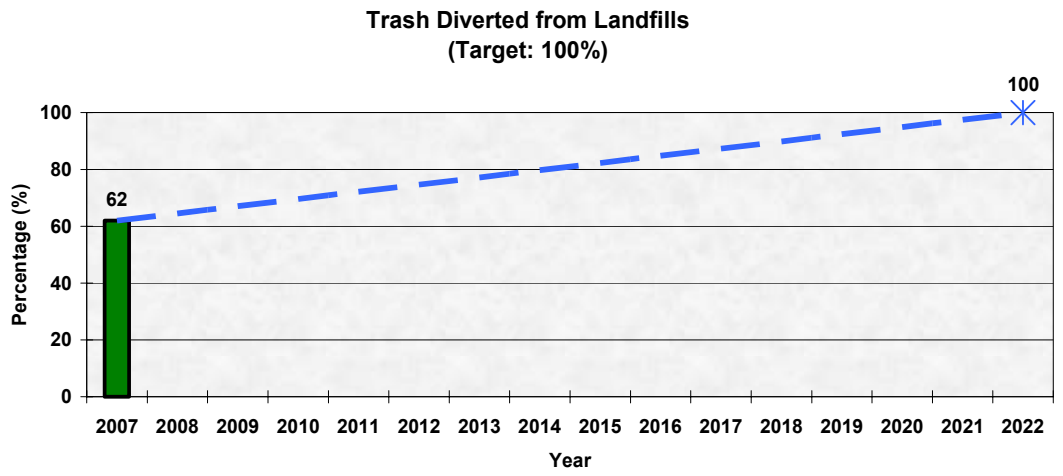
| | |
|---|---|
| construction and remodeling industry (United States Green Building Council (USGBC)),<br>▪ Non-profits, environmental groups, venue and special event organizers, & San Jose Conservation Corps | development, distribution, and stakeholder program evaluation<br>▪ Advertising zero waste efforts and provide technical support for event organizers (e.g., Web-based toolkit)<br>▪ Develop more effective tools to encourage businesses to set up recycling programs |

## Strategic Focus for 2009

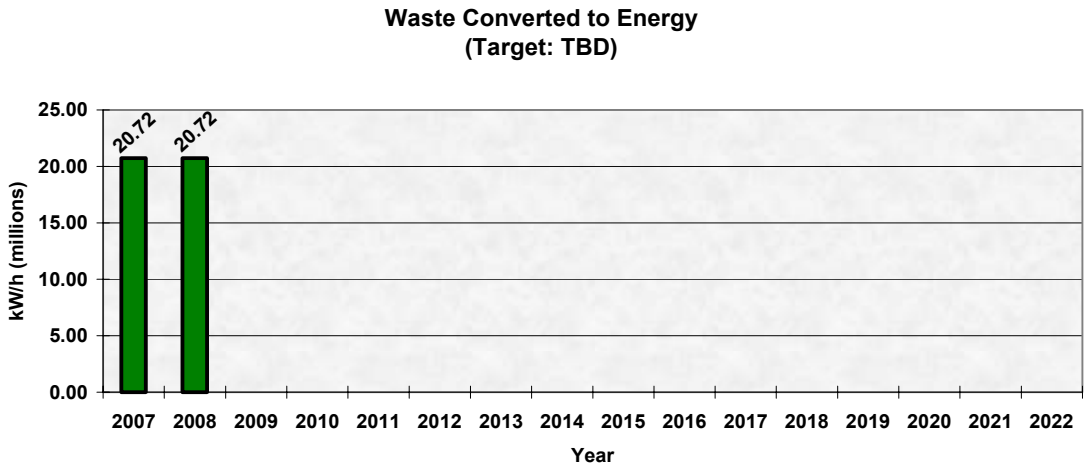
| Strategic Area | Strategic Focus | Proposed Strategy | 2009 Workplan |
|---|---|---|---|
| Leading by Example | Advance Commercial Redesign | Negotiate contracts that comply with City policy and provide cost-efficient services; identify sites for infrastructure | Design new commercial solid waste system; initiate procurement process for selecting new commercial haulers/recyclers. |
| Leading by Example | Streamline Construction Demolition Diversion Deposit (CDDD) program | Develop new program/reporting requirements for C&D facilities | Improve CDDD program, revamp to align with green building program |
| Leading by Example | Eliminate litter to achieve Zero Waste | Reduce use of disposable items | Develop policy to reduce litter |
| Strategic Partnerships | Develop waste to energy technology infrastructure at the City's WPCP | Collaborating with regional and state public partners as well as private planners and investors will provide the most efficient solution for waste diversion and energy production | Initiate process for procuring Waste to Energy (WTE) capacity on City owned land |

## Performance Measure

| Measure | Baseline 2007 | Current | Goal |
|---|---|---|---|
| Trash Diverted from Landfills | 62% diversion | Awaiting final 2008 data from the State of California Waste Board | 75% by 2013<br>100% by 2022 |




| Measure | Baseline 2007 | Current | Goal |
|---|---|---|---|
| Energy Generated from Waste | 20,723,968 | 20,723,968 kW/h* | TBD based on findings of Plant Master Plan |




*Energy from Newby Island landfill methane gas production

# Goal 6: Recycle or Beneficially Reuse 100% of Wastewater

*San José/Santa Clara Water Pollution Control Plant*

**Now in its 10th year** of operation, South Bay Water Recycling (SBWR) supplies an average of 11 million gallons per day (MGD) of water for irrigation and industrial use to 570 customers in Silicon Valley making it northern California's largest urban nonpotable water reuse program. The Goal 6 work plan aims to increase this use to 40 MGD through two means. Firstly, by extending the SBWR system to reach new customers and doubling the current amount of irrigation and industrial use; and secondly by working with the Santa Clara Valley Water District (SCVWD) to add recycled water to streams to improve the riparian environment, and potentially treating recycled water for recharging local drinking water aquifers. In addition to these uses, the San José/Santa Clara Water Pollution Control Plant (Plant) will continue to maintain the aquatic environment by providing a steady supply of fresh water to South San Francisco Bay. Successful implementation of Goal 6 will result in a four-fold increase in recycled water use over the next fifteen years.

**Priority Areas and Achievements:** To achieve the ambitious Goal 6 target of 100% beneficial reuse, staff is pursuing a two-tiered program of 1) increasing local irrigation and industrial reuse and 2) developing partnerships to promote a variety of local and regional uses of recycled water which are described in more detail below.

- **Increasing Nonpotable Demand for Recycled Water:** During the past year, the South Bay Water Recycling program has increased average daily use of recycled water by 7.8%, from 10.2 to 11 MGD. Significant efforts to reach the goal of 20 MGD by industrial users by 2022 include the following projects:

  - *Guadalupe River Park and Gardens Community Gardens:* By using recycled water, gardeners at this newest community garden near downtown San José will simultaneously lower their water bill and their environmental footprint. An extension will bring recycled water to an adjacent carwash, *AJ Auto Detailing*.

  - *Santa Clara Data Centers:* Data centers like the planned *DuPont Fabros* facility in Santa Clara can use up to 300,000 gallons of cooling water per day. Following DuPont's lead, extensions are planned to bring recycled water to at

least two additional data centers.

- *Mineta-San Jose International Airport:* The remodeled airport will feature a new terminal and will showcase the use of recycled water for a number of indoor and outdoor uses to as many as 11 million passengers per year.

- *Targeted Extensions:* Design of a pipeline to bring recycled water to *Santa Clara Central Park* is nearly complete, and plans are underway to extend service to *San Jose High Academy* near downtown San Jose and a shopping center at the former GE Plant site. With the help of the San Jose Redevelopment Agency, additional extensions could reach additional marquee facilities including the San Jose Convention Center and the HP Pavillion.

- *Developer Extensions:* Developers participating in the *North San Jose Intensification Project* will extend SBWR pipelines to serve their residential and commercial properties with recycled water for irrigation, cooling, and other appropriate applications.

*Recycled Water Purple Pipe System*

- **Partnerships to Promote Expanded Recycled Water Use:** Partnerships are essential to expanding recycled water use locally and throughout the Bay Area. We are continuing to strengthen existing and explore new partnerships, including the following:

  - *Industrial Users Group and Irrigation Roundtable:* The recently convened Industrial Users Group brings together current and prospective recycled water customers who use recycled water for cooling, manufacturing or other industrial applications. Another group to be formed in 2009 will provide a forum for SBWR irrigation customers to share successes, solve problems and develop their use of recycled water.

  - *San Jose Water Company:* During the past year the San José Water Company has been investigating opportunities to increase their involvement with South Bay Water Recycling by designing and building extensions to the recycled water distribution system in its service area.

  - *Bay Area Water Recycling Coalition:* San José joined nearly two dozen other Bay area cities working with the US Bureau of Reclamation to direct federal funds to support local water recycling projects. To date, Congress has contributed $28 million to the construction of South Bay Water Recycling, including nearly $1 million in fiscal year 2008.

- *Bay Area Clean Water Agencies (BACWA):* This year (2008-2009) San José chairs this regional organization of cities and special districts involved in managing wastewater treatment facilities. By participating in the BACWA Recycled Water Committee San Jose also influences the development of statewide policies and legislation regulating and promoting the use of recycled water.

- **Santa Clara Valley Water District—A Special Relationship:** As the agency responsible for supplying Santa Clara County with drinking water, the Santa Clara Valley Water District and the City are in a unique position to work together to develop the full potential of recycled water as Silicon Valley's locally-controlled, drought-proof water supply. To this end, we are currently collaborating on a variety of initiatives in order to reach the goal increasing the use of recycled water by the SCVWD for special projects from zero to 20 MGD.

  - *Edenvale:* A joint pilot project now under construction at IDT Inc. in southeast San José will demonstrate the technical capacity of local soils to support irrigation with recycled water without compromising the quality of underlying ground water. The City and the District are also working together to update the SBWR Groundwater Management and Mitigation Plan (GMMP).

  - *Advanced Water Treatment Facility:* In 2007 the District received over $3 million in state grant funds towards construction of a facility to further treat recycled water. Since that time, District and City staff have collaborated on the design of such a facility at the San Jose/Santa Clara Water Pollution Control Plant where it could improve its quality for a variety of uses, including blending with other supplies to recharge local groundwater.

  - *Long-term Agreement:* In September 2008 three District board members joined two members of the San Jose City Council and the mayor of the City of Santa Clara to expand the use of recycled water. A liaison committee comprised of two council members, the mayor of Santa Clara and three District board members was established to provide policy direction for this effort.

## Strategic Framework

**Lead by Example:**

- Use recycled water for irrigation, cooling and toilet flushing at city facilities including the Airport, parks, Guadalupe Gardens, and City Hall
- Advance pilot projects with Santa Clara Valley Water District to demonstrate technical capacity and feasibility of indirect potable reuse

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|---|---|
| **Advocate State and Federal Policies:**<br>▪ Advance ordinances and building codes<br>▪ Influence appropriate state and Federal regulations<br>▪ Support adoption of a Reuse Policy by the Santa Clara Valley Water District | **Strategic Partnerships:**<br>▪ Recycled water customers<br>▪ Tributary agencies<br>▪ Bay Area Recycled Water Coalition<br>▪ Santa Clara Valley Water District<br>▪ Water retailers<br>▪ Scientific and medical professionals |
| **Financing Mechanisms:**<br>▪ Increased revenues from the sale of recycled water;<br>▪ Connection fees for new development<br>▪ State and federal grants<br>▪ Investment by District and water retailers | **Communication and Engagement:**<br>▪ Technical and permitting assistance for existing and potential customers<br>▪ Demonstration projects (Guadalupe Gardens)<br>▪ Marketing & training materials<br>▪ Public education campaign to raise awareness and gain acceptance of indirect potable reuse |

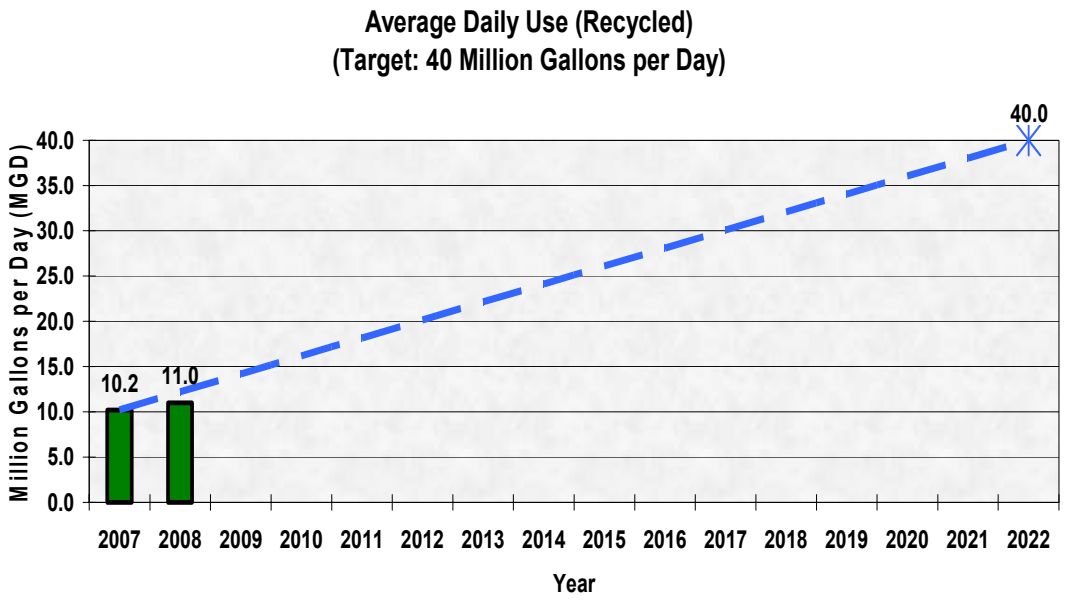
## Strategic Focus for 2009

| Strategic Area | Strategic Focus | Proposed Strategy | 2009 Workplan |
|---|---|---|---|
| Leading by Example | Expand uses of Recycled Water | Re-evaluate and expand criteria for new developments in the vicinity of SBWR pipeline alignments | Adoption of an ordinance for new development |
| Financing Mechanisms | Finance expanded recycled water infrastructure | Development fee to support recycle water | Recommend Development Fee for Council Approval by June |
| Strategic Partnerships | Execute an agreement with the Santa Clara Valley Water District for long-term development of recycled water use | Develop and analyze alternative modes of collaboration; facilitate meetings with elected officials to review and approve selected alternatives | Enter into a long-term agreement to expand uses of recycled water |

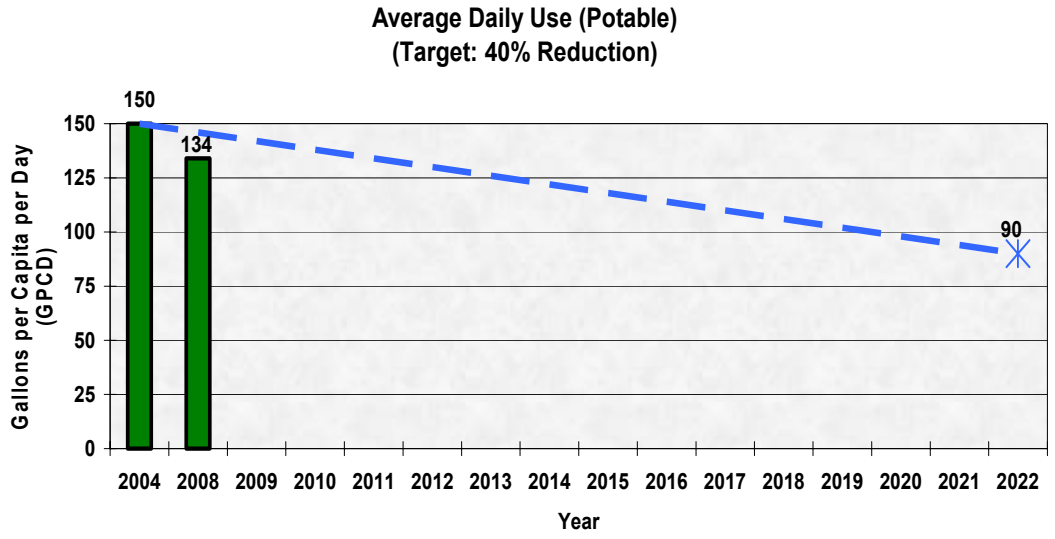
| | | | |
|---|---|---|---|
| Communications & Engagement | Expand markets for recycled water | Increase outreach to potential customers; highlighting cost-savings by existing customers | Develop outreach pieces targeted to industrial customers; establish regular meetings to educate landscape customers on best practices |
| Communications & Engagement | Gain public support for additional use recycled water | Expand educational outreach to residents | Develop a public information campaign to increase public awareness of recycled water safety and benefits |

## Performance Measures

| Measure | Baseline 2007 | Current | Goal |
|---|---|---|---|
| Average Daily Use (Recycled) | 10.2 | 11 | 40 MGD |

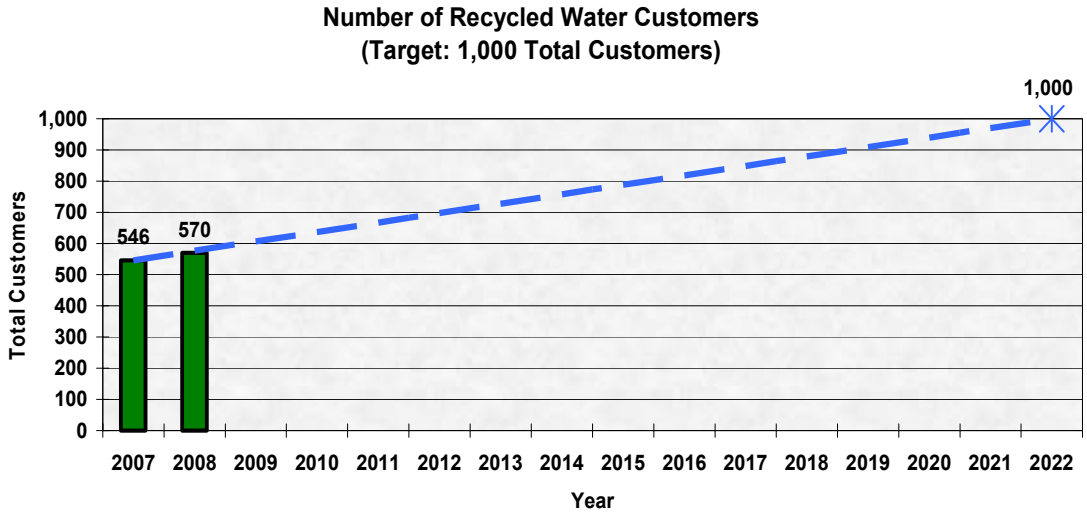


| Measure | Baseline 2004 | Current | Goal |
|---|---|---|---|
| Average Daily Use (Potable) | 150* | 134 | 90 GPCD |

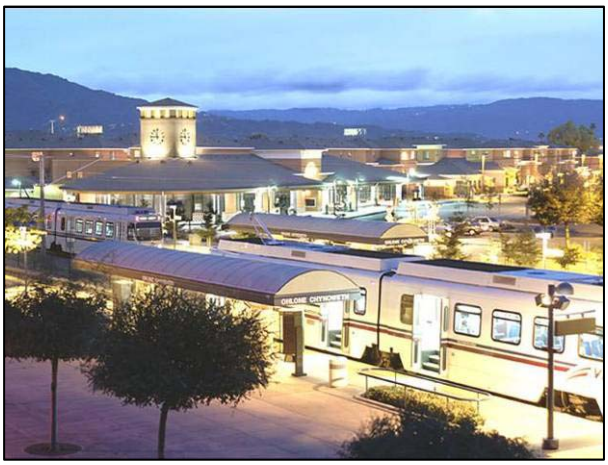



*2004 used as baseline for consistency with Bay Area wide potable water reduction baseline measured in Gallons per Capita per Day (GPCD).

| Measure | Baseline 2007 | Current | Goal |
|---|---|---|---|
| Number of Customers | 546 | 570 | 1,000 customers |



# Goal 7: Adopt a General Plan with Measurable Standards for Sustainable Development



*Santa Clara Valley Transportation Authority Light Rail*

**The vision for San Jose's future** is bold, building on the City's unique attributes of diversity of people, talent, cultural offerings, businesses, and neighborhoods. San José is poised to become a global center for innovation and economic development, recognizing the critical roles that high quality education, City services, and arts and culture will play in its economic future. San José is expected to continue to be a leader in renewable energy generation, recycled water usage, habitat protection and climate change. The General Plan Update is the mechanism to identify measurable standards for sustainable development through the year 2040.

In August, 2007, the Council appointed the Envision San Jose Task Force of community, business, and labor leaders to guide the General Plan Update process. The Task Force and the broader community strongly support enhancing the importance of environmental stewardship in the City's General Plan.

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

- **Envision San José 2040:** The General Plan Update Task Force has been working on the foundations for the Envision San José 2040 General Plan. These foundations include the:
  - Completion of a draft vision for San José's future
  - Creation of guidelines for the development of land use and transportation scenarios
  - Evaluation of key demographic and housing data
  - Future trends assessment regarding global cities, new workplaces, competition for talent, and the importance of "placemaking"

- **Sustainable Development:** Sustainability is an important theme for the General Plan Update. The Task Force is preparing a plan to secure San José's future to be fiscally sustainable as well as economically, socially and environmentally sustainable for the long term.

- **Walkability:** San José has an opportunity to become a community of interconnected, healthy neighborhoods/ villages where people can walk or bicycle to neighborhood services and businesses, and ride transit to jobs or other major centers/hubs. The Task Force has clearly expressed a desire for San to José become a place for "people, not just cars." The City's streets and trails are taking on greater importance as functional mobility corridors as well as aesthetic and recreational elements that need careful urban design attention.

*San José, California*

## Strategic Framework

**Lead by Example:** The Task Force and larger San José community will be engaged in the creation of land use and transportation scenarios that align and implement the multi-faceted sustainability vision for San José's future. This work should be complete in March 2009 and be available for Council consideration in April 2009. The scenarios will be analyzed in an Environmental Impact Report (EIR) for the Update. While the EIR is in preparation, the Task Force and public will work on the written General Plan text including goals, policies, and identification of specific measurable standards for sustainable development. Draft standards should be identified in late 2009.

**Advocate State and Federal Policies:**

- Support regional and local transportation investments
- Implement SB 375, greenhouse gas emission bill, through integration of regional transportation plan requirements

**Communication and Engagement:**

- Meaningful public engagement
- Monthly Task Force meetings & periodic community workshops to involve a broad cross-section of business, non-profit, and other community interests

## Strategic Focus for 2009

| Strategic Area | Strategic Focus | Proposed Strategy | 2009 Workplan |
|---|---|---|---|
| Communications & Engagement | Develop meaningful performance measures | Focused civic engagement with Task Force and community to identify specific performance measures | Submit Land Use and Transportation scenarios to Council in April. Draft General Plan measures to be completed by late 2009 |

**Performance Measures:** To be developed by the Task Force.

# Goal 8: Ensure 100% of Public Fleet Vehicles Run on Alternative Fuel

*Electric Vehicle used at the Water Pollution Control Plant.*

**Ensuring 100%** of the City's vehicle fleet run on alternative fuel will help stimulate the local market for alternative fuels and vehicles, advance development of businesses and technologies in this sector, reduce the City's reliance on imported oil, reduce transportation-related emissions, and enable the City to lead by example. The Green Fleet Policy aligns with this goal by reducing City vehicle emissions by over 25% over the next five years. Currently, 39% of the City's 2,593 vehicle fleet 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).

A wide variety of City departments currently use some type of alternative fuel vehicle. For example, the City's diesel powered vehicle fleet, including all Fire Department trucks, run on a B20 biodiesel fuel blend, the Airport uses compressed natural gas and electric vehicles for maintenance activities, the Environmental Services and Fire Departments use hybrids for inspection activities, electric vehicles and heavy equipment running on B20 biodiesel are used at the Water Pollution Control Plant, General Services employs bi-fuel vehicles for some building maintenance activities, and the Department of Transportation uses liquid propane gas forklifts. Additionally, many departments, including the Police Department, are using bicycles and have recently added segways as another form of transportation to augment their vehicle fleet.

**Priority Areas and Achievements:** To achieve the ambitious Goal 8 target of ensuring 100% of the public vehicle fleet runs on alternative fuel, staff is taking a two tiered approach by first replacing fleet vehicles with alternative fuel vehicles (AFV) when appropriate and second, by converting the existing vehicle fleet using an alternative fuel option.

- **Replacing Fleet Vehicles with Alternative Fuel Vehicles:** As City vehicles reach the end of their useful life, the City makes every effort to purchase and use the lowest emission vehicle or equipment item possible, while taking into account the vehicle's life-cycle costs and the ability to support City operations and services. Many vehicles used for inspection purposes are being

replaced with hybrids which get much higher mileage than older gas only vehicles. Additionally, many vehicles that are used for maintenance purposes, such as forklifts and light duty trucks, are being replaced with electric forklifts and delivery vehicles.

By the end of 2009, more than one thousand San José fleet vehicles are anticipated to be operating on some type of alternative fuel and during this time, the City's complement of low emission Hybrid vehicles will expand from 24 to 74 vehicles. The City also plans to pilot the use of ten Chevrolet Impalas in the police fleet in 2009. The Impalas are used by other municipalities in their Police vehicle fleet across the country and are anticipated to get higher mileage that the current complement of Police vehicles.

- **Converting fleet using Alternative fuel Options:** In 2007 the City began using biodiesel and transitioned from an initial blend of B-5 to the current blend of B20 for the entire diesel fleet. Currently, all 109 fire trucks and most heavy equipment at the Water Pollution Control Plan runs on B20 biodiesel. This graduated use of biodiesel has resulted in the reduction of 1,205,195 pounds or 603 tons of carbon dioxide.

## Strategic Framework

<table>
<tr><td colspan="2">Lead by Example:<br>▪ Considering the lowest emission vehicles and equipment available which supports city operations and service, San Jose has voluntarily chosen to use a diesel fuel containing a biodiesel blend of B20<br>▪ Our next goal is to expand the City's CNG fueling infrastructure by developing a station at the Central Service Yard</td></tr>
<tr><td>Advocate State and Federal Policies:<br>▪ Focus advocacy and funding at the State and Federal Level on augmenting public agency funding to align with upcoming environmental regulations</td><td>Strategic Partnerships:<br>▪ Public private partnerships that may subsidize the required infrastructure required to support various alternative fuel vehicles<br>▪ The City will continue to partner with Pacific Gas and Electric (PG&E) to maintain the existing fuel sites and develop future fueling infrastructure</td></tr>
</table>

**Financing Mechanisms:**

- Researching grant opportunities at the local, state, and federal levels to accelerate and offset the incremental costs of "Green" replacement vehicles beyond what can be achieved with the annual General Fund replacement allocation for fleet replacements
- Pursuing local, state, and federal grant opportunities to accelerate and offset the incremental costs of "Green" fueling infrastructure
- Pursuing grants from the 2009 Voluntary Airport Low Emission (VALE) program administered by the Federal Aviation Administration, to purchase electric fleet vehicles for use by Airport Operations and Facilities & Engineering divisions at the Norman Y. Mineta San José International Airport

**Communication and Engagement:**

- Public information releases to communicate to our residents and businesses that we are working to achieve our goals using the technologies available
- Public Information campaigns to show San José as a model for demonstrating the success of this effort and the benefits to the environment & to communicate with local fleet operators and private residents the opportunity to contract with the City for CNG fueling services

*San Jose fire trucks run on B20 biodiesel*

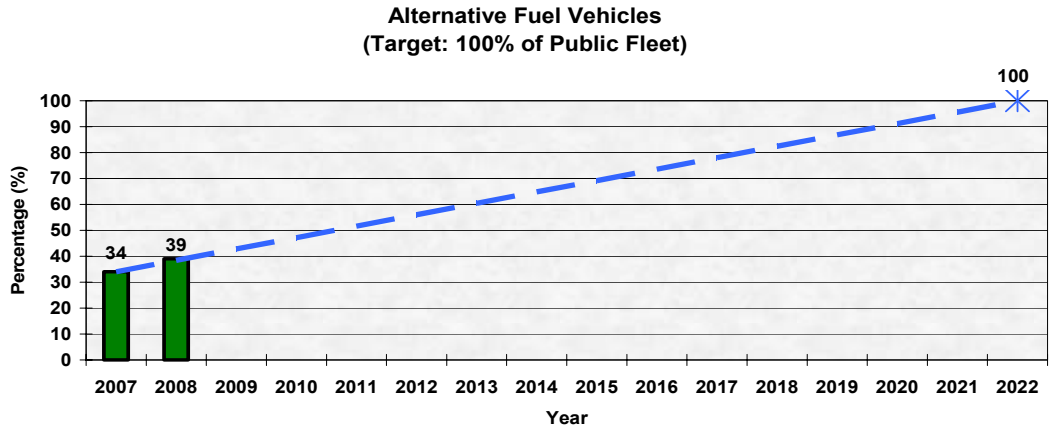
## Strategic Focus for 2009

| Strategic Area | Strategic Focus | Proposed Strategy | 2009 Workplan |
|---|---|---|---|
| Lead by Example | Reduce fuel consumption and GHG emissions | Use higher fuel efficiency vehicles in public safety fleet | Pilot 10 Chevrolet Impalas in police patrol vehicle fleet |
| Financing Mechanisms | Reduce green house gas emissions from fleet | Utilize annual fleet replacement funding to replace fleet in accordance with the Green Fleet Policy; Identify additional funding needed for diesel emission retrofits; Pursue grant | Reduce emissions at Airport with federal grant dollars (VALE grant) |

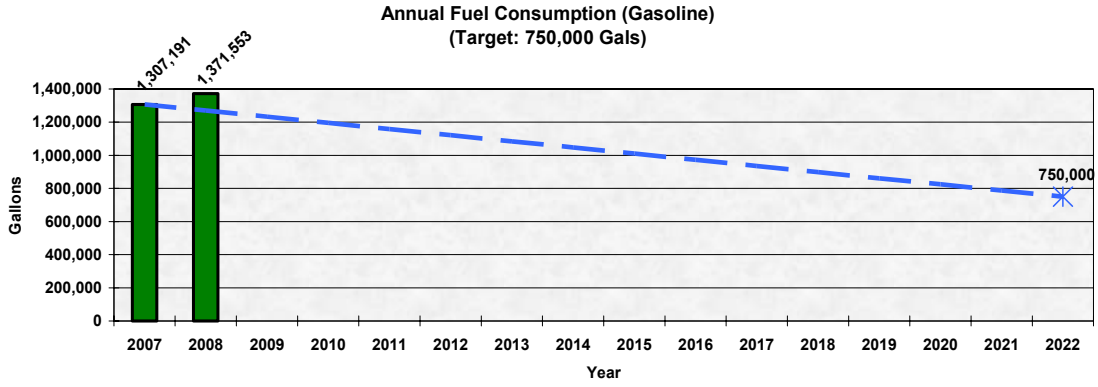
| | | | |
|---|---|---|---|
| | | funding | |
| Strategic Partnerships | Expand alternative fuel infrastructure | Collaborate with other jurisdictions for regional compatibility | Develop regional standards and leverage procurement |

## Performance Measures

| Measure | Baseline 2007 | Current | Goal |
|---|---|---|---|
| City Fleet – Alternative Fuel Vehicles | 34% | 39% | 100% |

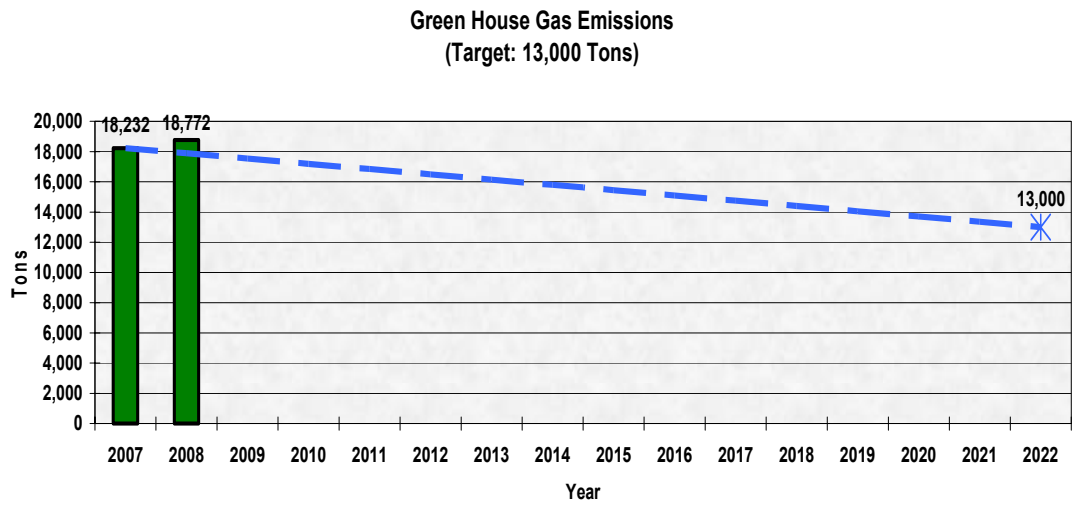



| Measure | Baseline 2007 | Current | Goal |
|---|---|---|---|
| Annual fuel consumption (gasoline) | 1,307,191 | 1,371,553* | 750,000 gallons |



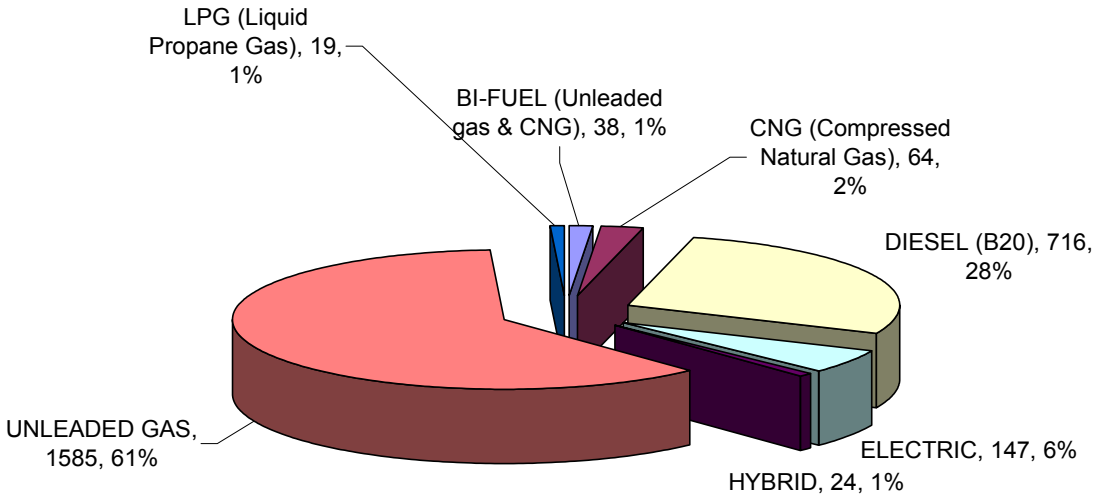

*Increase represents increase in fleet size and increased use of rental vehicles used during special events.

| Measure | Baseline 2007 | Current | Goal |
|---|---|---|---|
| Green House Gas Emissions | 18,232 | 18,772* | 13,000 tons |




*Increase represents increase in fleet size and increased use of rental vehicles used during special events.

**Total City Fleet Count and Percentage**



# Goal 9: Plant 100,000 New Trees and Replace 100 Percent of Streetlights with Smart, Zero Emission Lighting

*Green Mobility Showcase,*
*Santa Clara and Fourth Street*

**With an integrated approach,** planting 100,000 new trees and replacing all of the City's streetlights with smart, zero emission lights, will help the San José "green" its transportation infrastruture--to create an integrated, sustainable system that consumes less energy, protects the environment, and accommodates growth in a manner that enhances the City's quality of life.

Trees provide beauty, shade and cooling, habitat, storm water flow moderation, and air quality improvements. Public streetlights help to create a pleasing and attractive environment for nighttime activities. Upgrading the City's 62,000 streetlights to advanced lighting technology will enable the City to moderate the amount of light shining on its streets and sidewalks to meet the needs of pedestrian and drivers without consuming excess energy. Converting the City's streetlights would also allow the City to use its lighting infrastructure for other purposes. For example, the lights could be used for a city-wide system of electric vehicle charging stations or serve as wireless communications hubs to disseminate or collect information that would improve roadway conditions or provide information to vehicle drivers, cyclists and pedestrians. For purposes of the work plan, staff has organized the overall goal into two initiatives.

**Priority Areas and Achievements:** To accomplish Goal #9, staff has developed a work plan that seeks to drive technological innovation, confront the City's fiscal reality, and overcome regulatory constraints through partnerships and advocacy. This work plan focuses on the following priority areas:

- **Increased Tree Planting:** To achieve 100,000 net new trees in the City by 2022, the City is pursuing a number of strategies including:

  - Street Tree Inventory: The Department of Transportation (DOT) has secured a Department of Forestry and Fire Protection (CalFire) state matching grant in

the amount of $114,000 for the purpose of developing an inventory system and conducting a pilot street tree inventory. An accurate and complete street tree inventory is the first step in the process of determining the feasibility of a Citywide assessment district to fund street tree planting and maintenance. In order to generate a complete street tree inventory, an investment of $300,000-500,000 would be required and the project could be implemented over a three to five year period, assuming that the City continues to receive additional matching grants from the State of California. An inventory of missing street tree sites is also necessary, and DOT has incorporated a pilot missing street inventory project into the current Our City Forest (OCF) agreement. A variety of options are currently being considered to address the development of an inventory system that complies with the CalFire grant requirements.

- *Tracking New Tree Planting:* DOT has utilized in-house expertise to initiate the design and construction of a new tree database that will provide significant functionality enhancements and improvements beyond the capability of the existing Tree Master application. The new relational database can work in conjunction with the previous one so that historical data is preserved. Green Vision funding in the amount of $150,000 will be used in FY 2008-2009 to complete the design work and acquire the technology and hardware necessary to incorporate the administrative and field functions of the database into day-to-day Arborist's Office operations. Work has been initiated to coordinate with other City departments that are in some way involved with planting trees, including Development Services (Public Works (PW) and Planning, Building, and Code Enforcement (PBCE)), Parks, Recreation and Neighborhood Services (PRNS), Environmental Services Department (ESD), Airport and the Redevelopment Agency (SJRA). Sustainable tracking and reporting mechanisms still need to be developed in order to more accurately and completely account for private property tree plantings.

*Tree Planting Volunteers*

- **Metering and Programmable Streetlights:** On December 16, 2008, the City Council adopted a new Public Streetlighting policy that will convert all of the City's streetlights to smart, zero emission lights. Currently staff is testing new remotely controllable Light Emitting Diode (LED) streetlights as part of San José's Green Mobility Showcase on East Santa Clara Street. In October 2008, the City issued a Request for Proposals for 100 programmable energy efficient streetlights that will be installed in Spring 2009 in a low-income residential neighborhood. The lights, which are funded by a federal Community Development Block Grant (CDBG), would comply with the new Public Streetlighting policy. The grant also

includes funding to plant street trees in the same neighborhood. In accordance with the new public streetlighting policy, staff will be developing a Master Lighting Plan for the City that will identify where, when and by what degree the City can vary the lighting level of its streetlights. To take full advantage of cost savings achievable through dimming lights, the City must be able to individually meter its lights. Currently there is no cost-effective way to individually meter the City's streetlights that meets the California Public Utility Commission's (CPUC) metering standard. Staff intends to work with Pacific Gas and Electric (PG&E) and the CPUC to resolve this issue. The City has already begun a conversation with PG&E towards this end.

## Strategic Framework

**Lead by Example:**

- Develop Citywide Urban Forest Strategic Plan that outlines key policies, best management practices and funding strategies
- Pilot a smart streetlight demonstration project
- Develop a Master Lighting Plan, based on scientific evidence and stakeholder input, that governs where, when and to what degree the City may vary lighting levels around the city
- Pursue an advice filing with PG&E at the CPUC that allows the City to test means of individually metering its lights through advanced communications systems

*Light Emitting Diode (LED) Streetlights*

**Advocate State and Federal Policies:**

- Support funding through Federal Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU).

**Strategic Partnerships:**

- Explore possible tree planting projects with PG&E's ClimateSmart program to reduce greenhouse gas emissions
- Incorporate a pilot missing street tree inventory project in 2008-2009 grant agreement with Our City Forest
- Engage other City departments in the development of plan/methodology for tracking tree planting throughout the City
- Work with California PUC and PG&E to identify and implement a cost-effective means of metering individual public streetlights for billing purposes
- Mount demonstration of smart, energy efficient LED streetlights
- Develop a solar shade structure on sidewalks ("Cooling Station")

| Financing Mechanisms: | Communication and Engagement: |
|---|---|
| ▪ Using staff resources & SJRA Clean Tech Jobs funds<br>▪ CDBG grants to convert 100 streetlights to LED & plant 500 trees<br>▪ Continued exploration of property-based assessment district approach to secure funds to install smart, energy- efficient streetlights and fund tree planting and maintenance | ▪ Expand communication to the community regarding the benefits of a healthy and expanding Urban Forest through the City's Urban Forest website and relevant newsletters & publications |

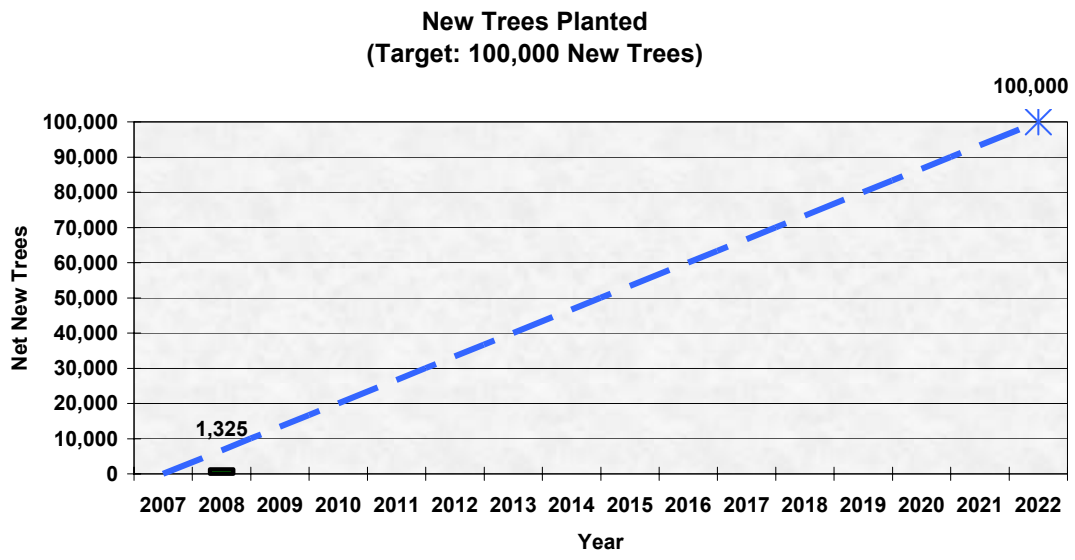
## Strategic Focus for 2009

| Strategic Area | Strategic Focus | Proposed Strategy | 2009 Workplan |
|---|---|---|---|
| Leading by Example | Reduce Citywide streetlight energy consumption | Develop Lighting Master Plan with criteria for adaptive lighting and potentially cap energy use for public streetlights | Council adoption of Master Lighting Plan |
| Advocating Policies | Change State regulation to allow cost effective metering of individual lights | Advocate CPUC regulatory changes | CPUC adoption of: tariffs for LED lights; evaluating technology that will enable billing based on real energy consumption |
| Financing Mechanisms | Identify funds for upgrade to smart, zero emission streetlights | Require energy efficiency lighting for new development; Identify Federal & City/SJRA funding sources | Install $500,000 worth of smart streetlights. Council adoption of private streetlighting policy for new development |
| Strategic Partnerships | Expand, maintain, and track new urban forest tree plantings through partnerships with residents and community groups | Develop partnerships with California Climate Action Registry to explore carbon offset program and develop system to comprehensively track | Provide ongoing funding for City resources and to support partnerships. Expand tree planting program |

| | | | |
|---|---|---|---|
| | | net new trees planted | with the California Climate Action Registry and Our City Forest |
| Strategic Partnerships | Power existing streetlights with renewable energy | Partner with private entities to develop cost-effective method to adapt existing streetlights to capture and use renewable energy | Identify potential partners to prototype renewable energy system |

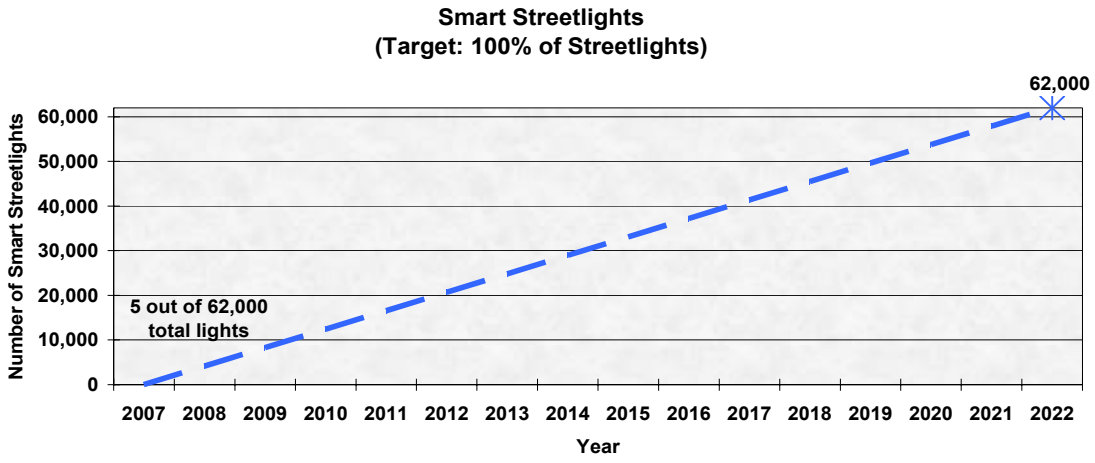
## Performance Measures

| Measure | Baseline 2007 | Current | Goal |
|---|---|---|---|
| Trees Planted | N/A | 1,325 | 100,000 trees |



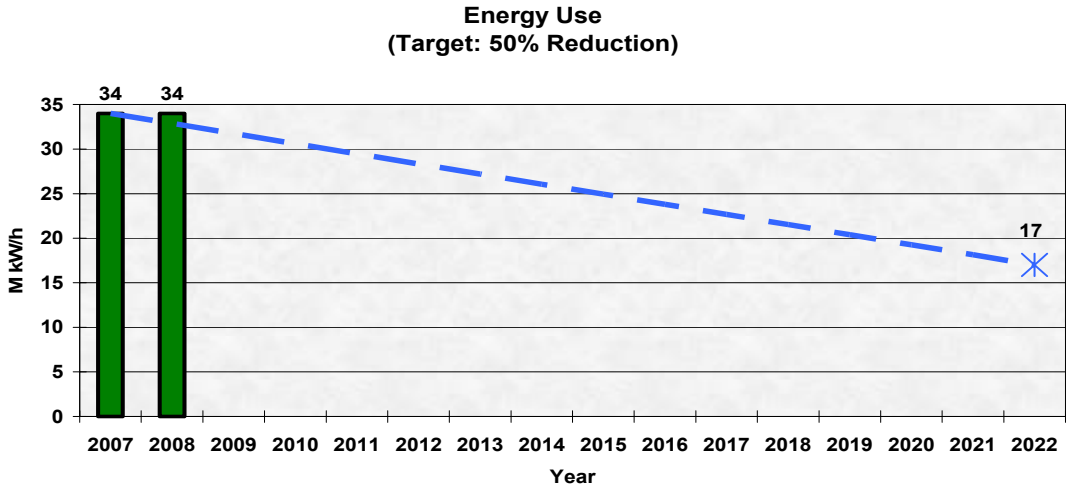

*Number is not comprehensive and does not include all trees on private and school properties.

| Measure | Baseline 2007 | Current | Goal |
|---|---|---|---|
| Smart Streetlights | 0 | 5* | 62,000 lights |




* 5 smart lights installed in early 2009 as a pilot project

| Measure | Baseline 2007 | Current | Goal |
|---|---|---|---|
| Energy Use | 34 | 34 | 17 M kWh/year (50% reduction) |



# Goal 10: Create 100 Miles of Interconnected Trails

*Guadalupe River Trail*

**San José currently has over 50 miles of trails and more than 150 miles of bike lanes** offering commuting, recreation, and environmental benefits protection to the City's residents. Expanding the City's trail and bikeways network promotes a healthy commuter alternative to the car, provides enjoyable recreational opportunities, reduces greenhouse gas emissions, reduces dependence on oil, and is an economical form of transportation. Nearly 40% of bicyclists commute to north San Jose employment centers along the trails and almost 1,000 people use trails through downtown San José each weekday. Additionally, many trails are located along the City's creeks and rivers, like the Guadalupe River, Coyote Creek and Los Gatos Creek, and trail projects not only offer a way to improve the quality of the riparian environment, but also offer a way for residents to appreciate and interact with the natural environment.

Fourteen trail projects and twelve on-street bikeway projects are actively under some form of development. Construction of trails along Coyote Creek and Albertson Parkway is underway and will result in an additional mile of new trail access. Large scale planning is occurring elsewhere along Coyote Creek and design work is well underway to construct 6 miles of paved trail along Lower Guadalupe River. During Fiscal Year 2008-09, five bike lane projects totaling five miles will be completed. The Trail Program's award-winning website is an important resource for education and promotion of the trail network and gives residents a way to track trail projects as they are completed and open for use.

**Priority Areas and Achievements:** To achieve this goal, staff is aggressively pursuing grant funds, updating City and VTA Plans, and increasing awareness of the existing network to encourage and increase use.

- **Grant Funding:** Development of trails and on-street bikeways in San José occurs with funding support from the Council as part of the annual budget process in conjunction with successful grant writing efforts. The Fiscal Year 2008-09 budget provides $17,600,000 for trail development with most of this funding sourced from grants. So far during Fiscal Year 2008-09, Staff has secured Council support for submission of $3,202,000 in trail grant requests and $668,000 in on-street bikeway grant requests. To date, $1,377,000 in trail grants has been secured,

(with the balance still pending) and $668,000 in on-street bikeway grants. Most grants require that local funds "front" expenditures and often require a local match.

- **The Trail Count Survey:** Staff has collected data to demonstrate to grant agencies that trails are popular and play an important role in the area's overall transportation system. This year's survey demonstrates high usage of trails and helps staff understand community needs and desires as projects are designed. Staff documented an over 7% increase in daily traffic along the Guadalupe River Trail, with one count station reporting an 86% increase likely due to completion of nearby under-crossings at Airport Parkway and Highway 101. Nearly 1,500 people were counted enjoying the Los Gatos Creek Trail on Saturdays. The 2008 count received a great deal of local press coverage and is now referenced by the Rails to Trails Conservancy on its website as a model for other agencies to follow. The counting effort results from staff making time in busy schedules to accomplish an important but unfunded project. It also requires continued support from many community volunteers and non-profit organizations, such as the Silicon Valley Bicycle Coalition and Friends of the Guadalupe River Trail & Gardens, as well as staff from area employers.

- **Bike Plan Update:** In May 2009, staff will bring to Council a recommended Bike Plan Update which will identify a 500 mile bikeway network consisting of interconnected trails and on-street bikeways. The Bike Plan Update will also recommend support infrastructure (such as bike parking) and programs to become a gold level Bicycle Friendly Community. Approval and implementation of this Bike Plan Update will support achievement of Green Vision Goal 10.

- **Valley Transportation Plan:** San José recently updated its bike projects identified for future funding in Valley Transportation Authority's long-term transportation plan *Valley Transportation Plan 2035* (*VTP 2035*). This updated document lists 21 trail and on-street bikeway projects and requests $120m in future funding, which has been partially identified from future grant revenues.

- **Bike to Work Week Activities:** For the past seven years, San José has hosted events and activities that promote bicycling during Bike to Work Week. These have included hosting morning Energizer Stations where bicycle commuters can stop for snacks and San José Bikeway Maps; the Mayor's Community Bike Ride; free Bike Skills Classes; distribution of free bicycle helmets; and other community events. These events provide support for San José's network of bicyclists and draw new enthusiasts into the fold.

- **Special Designations:** Increasing local and national awareness of San José's trail development reinforces the value of trails in meeting our Green Vision. Some designations also provide access to special grant resources. Staff has pursued several efforts to increase awareness, including:
  - Submitting an application for National Recreational Trail designation to the

Federal Department of the Interior (in conjunction with American Trails Organization) for several of the trail systems in the network

- San José's bronze designation as a Bicycle-Friendly Community was renewed by the League of American Bicyclists

- The Penitencia Creek Trail system was designated as part of the Bay Area Ridge Trail which will ultimately be a 550+ mile trail encircling the San Francisco Bay

- As noted previously, San José seeks to identify at least one trail alignment as part of the U.S. Bicycle Route System (similar to the national highway system)

*Guadalupe River Trail*

## Strategic Framework

**Lead by Example:**

- Construct trails at a rate of 3.3 miles per year (on average) to meet 100 mile goal
- Construct on-street bikeways at an average rate of 7.9 miles a year
- Pursue innovative technologies to reduce maintenance obligations
  - Staff has studied, tested, and is now making use of recycled asphalt for the base rock layer of paved trails
  - Staff is studying the use of low-energy, long-life and highly durable fixtures to illuminate under-crossings

**Advocate State and Federal Policies:**

- Regulations that support installation of secure bike parking, lockers, showers and other infrastructure to facilitate bike commuting. Trail Count shows that many commuters would not travel to work without these accommodations
- Secure parking for bicycles in new multi-family residential, commercial and institutional buildings
- Lobby for maintenance funds as part of U.S. Bicycle Route System designation
- Coordinate lobbying efforts with Association of Bay Area

**Strategic Partnerships:**

- Santa Clara Valley Water District (SCVWD): Ensure that trails are issue of special focus at least once per year at the joint City Council/ District Board coordination meeting
- Silicon Valley industry: Build awareness of trail systems along employment sites and ensure that employees understand any resources and facilities that might be available for bike commuting
- Health Care industry: Build awareness of trail systems and seek to suggest them as convenient and appropriate sites for prescribed fitness programs

| | |
|---|---|
| Governments (ABAG) for development of a pedestrian bridge and related trail improvements in the Alviso area as part of the Bay Trail in San José<br>▪ Streamline federal funding process<br>▪ Continue to lobby for defined funding sources (earmarks) for large and costly trail projects that can not be phased (ie. pedestrian bridges)<br>▪ Consider the California Environmental Quality Act (CEQA) as an equivalent to the National Environmental Policy Act (NEPA) | <br>*Los Gatos Creek trail approaching Willow Street* |
| **Financing Mechanisms:**<br>▪ Competitive grants from two sources: Bicycle Transportation Account (BTA) administered by Caltrans, and the Recreational Trails Program (RTP) administered by the State Resources Agency<br>▪ 10-20% matching funds from City<br>▪ Actively work with federal legislative representative offices to build support for trails as a legitimate transportation element in the reauthorization of the Federal Transportation Bill | **Communication and Engagement:**<br>▪ Social marketing campaign (reaching employees and employers), helping to understand the benefits of bike commuting<br>▪ A Bike to Work campaign – an opportunity for leadership, such as City Council and local Chief Executive Officers (CEO) may become champions for this effort<br>▪ The Trail Program website includes "Trail Stories" that document how community members use the trails to commute to work |

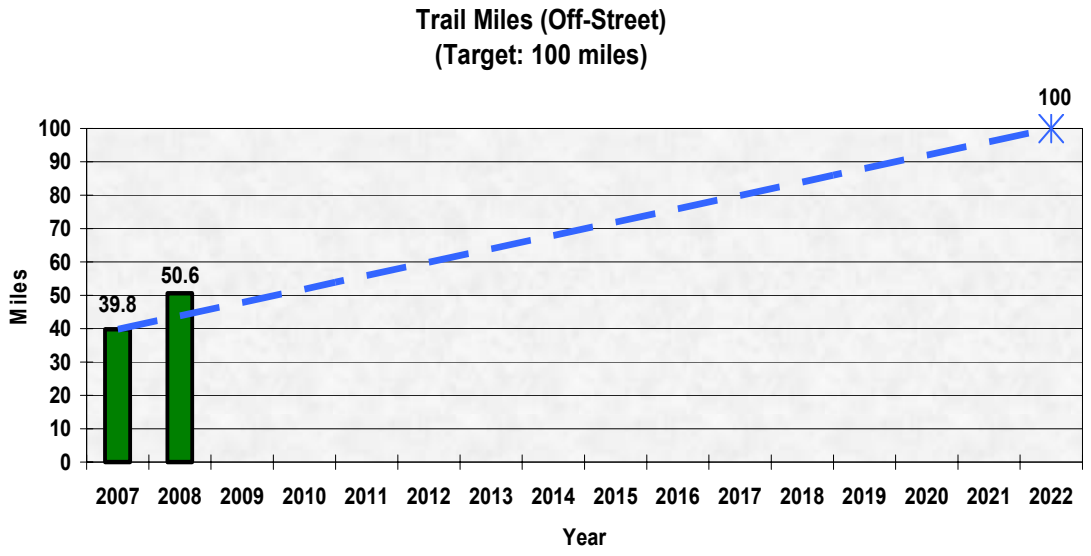
## Strategic Focus for 2009

| Strategic Area | Strategic Focus | Proposed Strategy | 2009 Workplan |
|---|---|---|---|
| Leading by Example | Expand City's bike network | Complete and implement Bike Plan Update | Bike Plan Update outreach and draft plan by March. Complete 5 miles of bike lanes. |
| Financing Mechanisms | Fund expansion of trail network | Work with regional, state, federal and private entities to | Seek funding for trails at the regional, state and |

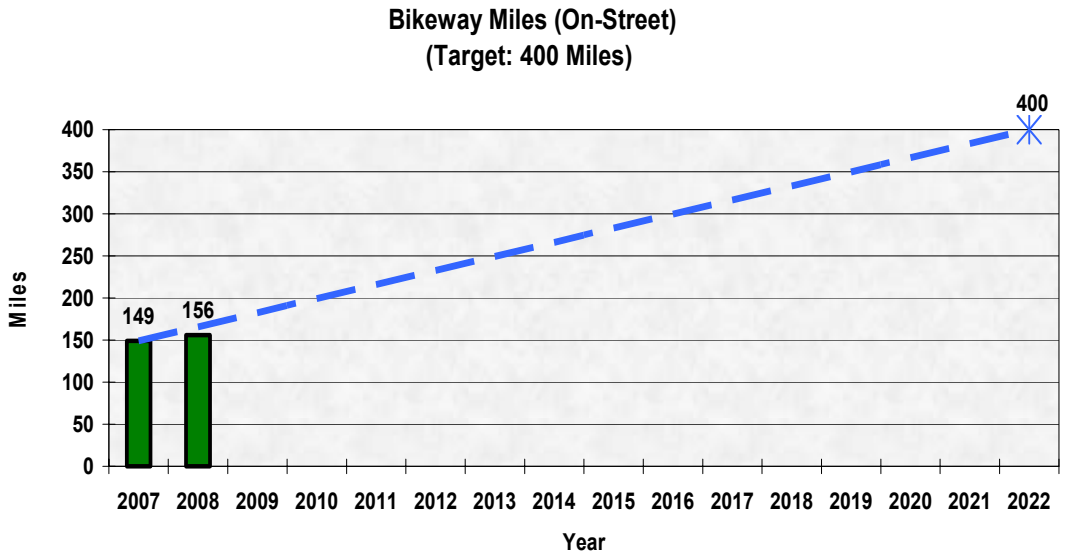
| | | | |
|---|---|---|---|
| | | secure funding and sponsorship. Freezing of State funds could become a critical issue if not resolved quickly | federal level, with a target of $9.9 million annually, to stay on track for Green Vision goal |
| Strategic Partnerships | Expand and maintain trail network through partnerships | Establish partnerships with non profits and private entities | Council adoption of volunteer policy. Increase miles adopted from 3.2 to 4.2 miles through Adopt a Trail program. Establish a Parks Foundation to support advocacy and fund raising for open space. |

## Performance Measures

| Measure | Baseline 2007 | Current | Goal |
|---|---|---|---|
| Trail Miles | 39.8 | 50.6 | 100 miles (interconnected) |



| Measure | Baseline 2007 | Current | Goal |
|---|---|---|---|
| On-Street Bikeways | 149 | 156 | 400 miles |



## Glossary

| Abbreviation | Description |
|---|---|
| AB | Assembly Bill |
| ABAG | Association of Bay Area Governments |
| AQI | Air Quality Index |
| BAAQMD | Bay Area Air Quality Management District |
| BACWA | Bay Area Clean Water Agency |
| BIG | Build it Green |
| BTA | Bicycle Transportation Account |
| CAL FIRE | California Department of Forestry and Fire Protection |
| CAP | Climate Action Plan |
| CDBG | Community Development Block Grant |
| CDDD | Construction Demolition Diversion Deposit Program |
| C&D | Construction and Demolition |
| CEC | California Energy Commission |
| CEO | Chief Executive Officer |
| CEQA | California Environmental Quality Act |
| CNG | Compressed natural gas |
| DOE | Department of Energy |
| EB MUD | East Bay Municipal Utility District |
| EBC | Environmental Business Cluster |
| EIR | Environmental Impact Report |
| EP3 | Environmentally Preferable Procurement Policy |
| EPP | Environmentally Preferable Procurement |
| EPR | Extended Producer Responsibility |
| GHG | Greenhouse gas |
| GMMP | Groundwater Management and Mitigation Plan |
| GPCD | Gallons per Capita per Day |
| kW | Kilowatt |
| LED | Light Emitting Diode |
| LEED | Leadership in Energy and Environmental Design |
| LPG | Liquid Propane Gas |
| NEPA | National Environmental Policy Act |
| MW | Megawatt |
| MGD | Million gallons per day |
| MTC | Metropolitan Transportation Commission |
| OCF | Our City Forest |
| PG&E | Pacific Gas and Electric |
| PPA | Power Purchase Agreement |
| PUC | California Public Utilities Commission |
| PV | Photovoltaic |
| RFI | Request for Information |
| RFP | Request for Proposals |
| RPN | Responsible Purchasing Network |
| RTP | Recreational Trails Program |
| SAFETEA-LU | Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users |

| | |
|---|---|
| SB | Senate Bill |
| SBWR | South Bay Water Recycling |
| SCVWD | Santa Clara Valley Water District |
| SEP | Strategic Energy Plan |
| SF PUC | San Francisco Public Utilities Commission |
| SJ | San José |
| SJRA | San José Redevelopment Agency |
| SNI | Strong Neighborhoods Initiative |
| STI | Special tenant improvement |
| UL | Underwriters Laboratory's |
| USGBC | United States Green Building Council |
| VALE | Voluntary Airport Low Emission |
| VTA | Santa Clara Valley Transportation Authority |
| WPCP | San José/Santa Clara Water Pollution Control Plant |

# APPENDIX A

# URBAN ENVIRONMENTAL ACCORDS

*Signed on the occasion United Nations Environment Programme World Environment Day*
*June 5th, 2005 in San Francisco, California*

## GREEN CITIES DECLARATION

**Recognizing** that for the first time in history, the majority of the planet's population now lives in cities and that continued urbanization will result in one million people moving to cities each week, thus creating a new set of environmental challenges and opportunities; and

**Believing** that as Mayors of cities around the globe, we have a unique opportunity to provide leadership to develop truly sustainable urban centers based on culturally and economically appropriate local actions; and

**Recalling** that in 1945 the leaders of 50 nations gathered in San Francisco to develop and sign the Charter of the United Nations; and

**Acknowledging** the importance of the obligations and spirit of the 1972 Stockholm Conference on the Human Environment, the 1992 Rio Earth Summit (UNCED), the 1996 Istanbul Conference on Human Settlements, the 2000 Millennium Summit, and the 2002 Johannesburg World Summit on Sustainable Development, we see the Urban Environmental Accords described below as a synergistic extension of the efforts to advance sustainability, foster vibrant economies, promote social equity, and protect the planet's natural systems;

**Therefore, be it resolved**, today on World Environment Day 2005 in San Francisco, we the signatory Mayors have come together to write a new chapter in the history of global cooperation. We commit to promote this collaborative platform and to build an ecologically sustainable, economically dynamic, and socially equitable future for our urban citizens; and

**Be it further resolved** that we call to action our fellow Mayors around the world to sign the Urban Environmental Accords and collaborate with us to implement the Accords; and

**Be it further resolved** that by signing these Urban Environmental Accords, we commit ourselves to moving vital issues of sustainability to the top of our legislative agendas. By implementing the Urban Environmental Accords, we aim to realize the right to a clean, healthy, and safe environment for all members of our society.

## URBAN ENVIRONMENTAL ACCORDS: VISION AND IMPLEMENTATION

The 21 Actions that comprise the Urban Environmental Accords are proven first steps toward environmental sustainability. However, to achieve long-term sustainability, cities will have to progressively improve performance in all thematic areas.

Implementing the Urban Environmental Accords will require an open, transparent, and participatory dialogue between government, community groups, businesses, academic institutions, and other key partners. Accords implementation will benefit where decisions are made on the basis of a careful assessment of available alternatives using the best available science.

The call to action set forth in the Accords will most often result in cost savings as a result of diminished resource consumption and improvements in the health and general well-being of city residents. Implementation of the Accords can leverage each city's purchasing power to promote and even require responsible environmental, labor and human rights practices from vendors.

Between now and the World Environment Day 2012, cities shall work to implement as many of the 21 Actions as possible. The ability of cities to enact local environmental laws and policies differs greatly. However, the success of the Accords will ultimately be judged on the basis of actions taken. Therefore, the Accords can be implemented though programs and activities even where cities lack the requisite legislative authority to adopt laws.

The goal is for cities to pick three actions to adopt each year. In order to recognize the progress of cities to implement the Accords a City Green Star Program shall be created. At the end of the seven years a city that has implemented:

| | | | |
|---|---|---|---|
| 19 to 21 Actions | *shall be recognized as a* | ★★★★ | **City** |
| 15 to 18 Actions | *shall be recognized as a* | ★★★ | **City** |
| 12 to 17 Actions | *shall be recognized as a* | ★★ | **City** |
| 8 to 11 Actions | *shall be recognized as a* | ★ | **City** |

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**Energy**
*Renewable Energy* | *Energy Efficiency* | *Climate Change*
**Waste Reduction**
*Zero Waste* | *Manufacturer Responsibility* | *Consumer Responsibility*
**Urban Design**
*Green Building* | *Urban Planning* | *Slums*
**Urban Nature**
*Parks* | *Habitat Restoration* | *Wildlife*
**Transportation**
*Public Transportation* | *Clean Vehicles* | *Reducing Congestion*
**Environmental Health**
*Toxics Reduction* | *Healthy Food Systems* | *Clean Air*
**Water**
*Water Access and Efficiency* | *Source Water Protection* | *Waste Water Reduction*

## ENERGY

**Action 1** Adopt and implement a policy to increase the use of renewable energy to meet ten per cent of the city's peak electric load within seven years.
**Action 2** Adopt and implement a policy to reduce the city's peak electric load by ten per cent within seven years through energy efficiency, shifting the timing of energy

demands, and conservation measures.
**Action 3** Adopt a citywide greenhouse gas reduction plan that reduces the jurisdiction's emissions by twenty-five per cent by 2030, and which includes a system for accounting and auditing greenhouse gas emissions.

### WASTE REDUCTION

**Action 4** Establish a policy to achieve zero waste going to landfills and incinerators by 2040.
**Action 5** Adopt a citywide program that reduces the use of a disposable, toxic, or non-renewable product category by at least fifty per cent in seven years.
**Action 6** Implement "user-friendly" recycling and composting programs, with the goal of reducing by twenty per cent per capita solid waste disposal to landfill and incineration in seven years.

### URBAN DESIGN

**Action 7** Adopt a policy that mandates a green building rating system standard that applies to all new municipal buildings.
**Action 8** Adopt urban planning principles and practices that advance higher density, mixed use, walkable, bikeable, and disabled-accessible neighborhoods which coordinate land use and transportation with open space systems for recreation and ecological restoration.
**Action 9** Adopt a policy or implement a program that creates environmentally beneficial jobs in slums and/or low-income neighborhoods.

### URBAN NATURE

**Action 10** Ensure that there is an accessible public park or recreational open space within half-a-kilometer of every city resident by 2015.
**Action 11** Conduct an inventory of existing canopy coverage in the city and then establish a goal based on ecological and community considerations to plant or maintain canopy coverage in not less than 50 per cent of all available sidewalk planting sites.
**Action 12** Pass legislation that protects critical habitat corridors and other key habitat characteristics (e.g. water features, food-bearing plants, shelter for wildlife, use of native species, etc.) from unsustainable development.

### TRANSPORTATION

**Action 13** Develop and implement a policy which expands affordable public transportation coverage to within half-a-kilometer of all city residents in ten years.
**Action 14** Pass a law or implement a program that eliminates leaded gasoline (where it is still used); phases down sulfur levels in diesel and gasoline fuels, concurrent with using advanced emission controls on all buses, taxis, and public fleets to reduce particulate matter and smog-forming emissions from those fleets by 50 per cent in seven years.
**Action 15** Implement a policy to reduce the percentage of commuter trips by single occupancy vehicles by ten per cent in seven years.

### ENVIRONMENTAL HEALTH

**Action 16** Every year, identify one product, chemical, or compound that is used within the city that represents the greatest risk to human health and adopt a law and provide incentives to reduce or eliminate its use by the municipal government.
**Action 17** Promote the public health and environmental benefits of supporting locally

grown organic foods. Ensure that twenty per cent of all city facilities (including schools) serve locally grown and organic food within seven years.
**Action 18** Establish an Air Quality Index (AQI) to measure the level of air pollution and set the goal of reducing by 10 per cent in seven years the number of days categorized in the AQI range as "unhealthy" or "hazardous."

### WATER

**Action 19** Develop policies to increase adequate access to safe drinking water, aiming at access for all by 2015. For cities with potable water consumption greater than 100 liters per capita per day, adopt and implement policies to reduce consumption by 10 per cent by 2015.
**Action 20** Protect the ecological integrity of the city's primary drinking water sources (i.e., aquifers, rivers, lakes, wetlands and associated ecosystems).
**Action 21** Adopt municipal wastewater management guidelines and reduce the volume of untreated wastewater discharges by ten per cent 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.

# APPENDIX B

# Bay Area Climate Change Compact

**Preamble**

We, as signatories of this Bay Area Climate Change Compact, recognize the need for immediate, coordinated and visionary action on greenhouse gas reductions and progress toward a sustainable society that is resilient to climate change. Further, we:

Fully support the state of California's climate change goals set forth in the AB 32 Global Warming Solutions Act and Executive Order # S-3-05 (2000 levels by 2010, 1990 levels by 2020, 80% below 1990 by 2050);

Have each established our respective municipal, agency, and organizational goals and programs;

Recognize that the challenges we face are regional in nature and can best be addressed in partnership;

Will strive to enable and expand the environmental, economic, and equity benefits of climate action;

Will commit leadership resources to work together in order to realize our shared vision.

**Purpose**

We are committed to creating a public-private identity that best serves our region and all of its municipalities, institutions, and communities in helping to meet the state of California's goals for reducing greenhouse gas emissions. We are also dedicated to helping Bay Area communities prepare for and adapt to the impacts of climate change.

**Vision**

Our vision is to enable a healthy, safe and globally competitive Bay Area through collaborative action on climate change. Our coordinated efforts will be a model for regional action in California, the nation, and the world.

**Leadership Call to Action**

We will promote our vision through various channels of action, including public policy, education, market shifts and behavioral change. Our approach will evolve over time. We challenge the region to join us in our efforts.

We wil work together to advance:

A sustainable built environment, encompassing buildings, public spaces, waste reduction and resilience to climate change, including sea level rise;

Models of planning and development that reduce the region's carbon footprint;

Economic opportunity and innovation that makes possible green jobs, provides workforce training and education, and enables cutting-edge research and development;

Renewable energy choices that decrease reliance on carbon-intensive fuels;

Transportation and commuting choices that improve our quality of life;

Constructive legislation at the local, state, and federal level; and

Increase the volume of waste products diverted from landfills.

To accelerate results, and best serve the region, we will seek to:

Advance models for use by the broader regional community on effective local actions being taken to reduce GHG emissions;

Help to identify and disseminate emerging best practices for each sector: public, private, and civil society;

Accelerate adoption of solutions by scaling up successful programs across the region;

Where advantageous, leverage selected green resources (e.g. solar inspectors, community college green collar programs), in order to maximize limited resources and speed progress;

Harmonize standards for more effective dissemination and action across the region, and;

Monitor and track progress in reducing emissions and increasing resiliency.

**Action Area Goals**

Our public-private partnership will initially focus on the three largest Bay Area cities to guide and develop, by joint example, actions that reduce the region's greenhouse gas emissions, and increase the region's resiliency to the impacts of climate change. Action area goals and aggregate targets for the three cities, working in cooperation with the partners to this Compact include:

1. Establish an example reference standard for "baseline" green building and rooftop solar practices by the end of 2010;

2. Incentivize and encourage transportation mode-shifts, such as networked work locations, bicycling and public transit, to reduce 2008 baseline gasoline consumption 3% by the end of 2013, and 8% by the end of 2018;

3. From a 2008 baseline, increase by 30% the use of renewable sources for electrical energy by the end of 2013 and by 50% by the end of 2018;

4. Through conservation and energy efficiency, reduce electrical energy usage in buildings from a 2008 baseline by an average of 10% by the end of 2013 and by 15% by the end of 2018;

5. Increase the available blue and white collar "clean and green workforce" course/trainings by the end of 2013 and help place 20,000 trainees and graduates in the labor force by the end of 2013;

6. From a 2008 baseline, decrease community water consumption by 15% by the end of 2013 and 20% by the end of 2018 and increase water recycling rates by 10% by the end of 2013 and 15% by the end of 2018;

7. Develop and adopt municipal and organizational climate adaptation plans by the end of 2013 to increase resiliency to the impacts of climate change;

8. Implement a common, ongoing region-wide public information campaign by the end of 2010, to reduce greenhouse gas emissions and increase community resiliency;

9. Increase solid waste diversion from landfills to 75% by the end of 2013, and achieve zero waste by the end of 2020;

10. Increase the number of zero emission and other advanced ultra-low emission light duty vehicles to 10% of municipal fleets by the end of 2013, and to 25% by the end of 2018.

# APPENDIX C

# The U.S. Mayors Climate Protection Agreement

## (As endorsed by the 73rd Annual U.S. Conference of Mayors meeting, Chicago, 2005)

A. We urge the federal government and state governments to enact policies and programs to meet or beat the target of reducing global warming pollution levels to 7 percent below 1990 levels by 2012, including efforts to: reduce the United States' dependence on fossil fuels and accelerate the development of clean, economical energy resources and fuel-efficient technologies such as conservation, methane recovery for energy generation, waste to energy, wind and solar energy, fuel cells, efficient motor vehicles, and biofuels;

B. We urge the U.S. Congress to pass bipartisan greenhouse gas reduction legislation that 1) includes clear timetables and emissions limits and 2) a flexible, market-based system of tradable allowances among emitting industries; and

C. We will strive to meet or exceed Kyoto Protocol targets for reducing global warming pollution by taking actions in our own operations and communities such as:

1. Inventory global warming emissions in City operations and in the community, set reduction targets and create an action plan.
2. Adopt and enforce land-use policies that reduce sprawl, preserve open space, and create compact, walkable urban communities;
3. Promote transportation options such as bicycle trails, commute trip reduction programs, incentives for car pooling and public transit;
4. Increase the use of clean, alternative energy by, for example, investing in "green tags", advocating for the development of renewable energy resources, recovering landfill methane for energy production, and supporting the use of waste to energy technology;
5. Make energy efficiency a priority through building code improvements, retrofitting city facilities with energy efficient lighting and urging employees to conserve energy and save money;
6. Purchase only Energy Star equipment and appliances for City use;
7. Practice and promote sustainable building practices using the U.S. Green Building Council's LEED program or a similar system;
8. Increase the average fuel efficiency of municipal fleet vehicles; reduce the number of vehicles; launch an employee education program including anti-idling messages; convert diesel vehicles to bio-diesel;
9. Evaluate opportunities to increase pump efficiency in water and wastewater systems; recover wastewater treatment methane for energy production;
10. Increase recycling rates in City operations and in the community;
11. Maintain healthy urban forests; promote tree planting to increase shading and to absorb CO2; and
12. Help educate the public, schools, other jurisdictions, professional associations, business and industry about reducing global warming pollution.