



# Memorandum

---

**TO:** HONORABLE MAYOR AND  
CITY COUNCIL

**FROM:** Debra Figone

**SUBJECT:** SEE BELOW

**DATE:** March 20, 2012

---

**SUBJECT: GREEN VISION 2011 ANNUAL REPORT AND 2012 WORK PLAN**

## **RECOMMENDATION**

Approve the 2011 Green Vision Annual Report and 2012 Work Plan priorities and implementation framework.

## **OUTCOME**

The attached Green Vision 2011 Annual Report provides an opportunity for the Mayor and Council to review the progress made on the implementation of the Green Vision and highlights accomplishments and strategic direction for each of the goals. Approval of the proposed 2012 Work Plan priorities and implementation framework will allow staff to continue their efforts to advance the Green Vision.

## **BACKGROUND**

On October 7, 2007, San José City Council adopted the Green Vision, which outlines 10 ambitious goals for economic development, environmental leadership, and an enhanced quality of life for San José residents and businesses (see Table 1 below). Since then, the Green Vision has helped guide staff's efforts in a broad spectrum of areas including economic development, energy, green buildings, water, waste, sustainable growth, streetlights, trees, and trails. It has also positioned San José as a leader in clean technology and environmental sustainability as evidenced by the numerous awards and accolades garnered. This in turn has led to the formation of multiple strategic partnerships and a significant influx of grant funding that has helped advance Green Vision goals even in this time of extremely limited City funding for the initiative.

**Table 1. Green Vision Goals**

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

To enable collaboration and citywide implementation of the Green Vision, staff developed a strategic framework which connects the goals, implementation strategies, and project-level day-to-day actions to the broader intended outcomes of driving economic opportunity and growth, eliminating the structural budget deficit, demonstrating environmental leadership, and improving the quality of life throughout the community.

The strategic framework is developed around the following five areas:

- **Leading by example** – Policies and practices that the City can modify or establish to advance the Green Vision priorities
- **Advocating policies** (at the regional, State, and Federal levels) – Advocating legislative action and positioning the City to partner with other agencies on policy changes and development
- **Financing mechanisms** – Exploring new financing mechanisms such as grants, modified fee structures, and improvement districts to supplement City dollars
- **Forming strategic partnerships** – Partnering with other entities, such as schools, universities, non-profits, and private corporations to work towards common goals
- **Communications and engagement** – Communicating with key audiences to bring about awareness, acceptance, and action on all of the goals

The Green Vision touches nearly all City service areas and has the ability to impact the community in a multitude of ways. In order to ensure focused efforts that make the best use of staff resources and that align with the City's overall goals and priorities, in March 2009, Council directed staff to use the following criteria to develop the annual and long term work plans for all Green Vision goals:

- 1) Cost savings
- 2) Private investment generated
- 3) Measurable advancement towards goals

These criteria continue to guide the work efforts on all goals and are manifested in the accomplishments as well as the proposed 2012 Work Plan.

## ANALYSIS

The fourth Green Vision Annual Report provides an update on the status of all ten goals, and includes information on San José's Greenhouse Gas Reduction Strategy as well as progress on the Urban Environmental Accords. The recent recession and several consecutive years of budget deficits have taken a heavy toll on the City's fiscal situation and there is very limited funding available for Green Vision implementation. Thus, in early 2010 and again in 2011, Council directed staff to maximize opportunities to leverage non-City funding and form strategic partnerships to advance Green Vision goals, create jobs, and reduce the City's operating costs.

Staff has done a tremendous job of following up on this direction and has actively pursued grants, solicited partnerships, and made significant advances on several goals in 2011. In doing so, they have positioned San José as a national and international leader in areas such as renewable energy, green buildings, recycled water, zero waste, and the deployment of smart LED streetlights.

### *Key Performance Metrics*

The following table shows our 2011 status in comparison to our 2022 targets. Staff has been tracking these key performance metrics (shown below) and additional supporting metrics for each goal since 2007, the Green Vision's baseline year. Please see the Green Vision website for a comprehensive graph and individual performance metrics for each goal:

<http://greenvision.sanjoseca.gov/GreenVisionGoals.aspx>.

**Table 2. Progress Towards Green Vision Goals**

<i>Green Vision Goal</i>	<i>2011 Status</i>	<i>2022 Target</i>
Clean Tech Jobs	7,000	25,000
Per Capita Energy Use Reduction (%)	9.2	50
Electricity from Renewable Energy (%)	17	100
Green Buildings (million square feet)	5.4	50
Trash Diverted from Landfills (%)	71	100
Average Daily Use of Recycled Water (Million Gallons Per Day)	8.1	40
Alternate Fuel Vehicles in Public Fleet (%)	40	100
Net New Trees	6,617	100,000
Smart Streetlights	297	62,000
Interconnected Trails (miles)	53.7	100

### *Grants*

To date, San José has received \$85 million in grant funding for Green Vision related programs and projects. In 2011, grant applications totaling over \$40 million were submitted, over \$14 million in grants were attained, and nearly \$5 million in applications are pending. Grants from other local, State, and Federal grant funding sources such as the California Department of Water Resources, the California Strategic Growth Council, and the Federal Highway Administration continue to be actively pursued. Although the City has been able to advance several energy, water, and waste projects with Federal and State dollars, given the significant budget deficits at both levels, the future of these revenue streams is uncertain at best. To be able to pursue and

leverage grants successfully, it is essential to have adequate staffing resources and local funding matches.

### ***Strategic Partnerships***

The City's Demonstration Partnership Policy provides an excellent framework for forming strategic partnerships with public and private entities on several Green Vision goals. In 2011, Armageddon Energy installed a one kilowatt SolarClover solar array on the rooftop of the Council Wing at City Hall. This demonstration builds public awareness of a particular innovation that could lead to eventual marketplace adoption. Another example of a Strategic Partnership was the Green Vision Clean Energy Showcase across from City Hall. The Showcase was the first outdoor demonstration site of large scale, cutting-edge solar, wind, electric vehicle and energy efficiency technologies in the United States. Between December 2010 and November 2011, over 6,500 attendees toured the Showcase, including the general public, nonprofit organizations, workforce training programs, and students ranging from elementary school to college. Due to the conclusion of the Solar America Cities grant and no available funding to continue staffing tours, the Showcase was dismantled and displays were moved to other nearby cities and organizations to continue informing the community about clean energy.

Additionally in 2011, the City entered into a one-year Demonstration Partnership with WattzOn to launch Green Energy Match, a residential energy efficiency pilot program to link residential energy savings to economic development via a local rewards program backed by small businesses in three specific neighborhoods. In each of these examples, San José has helped demonstrate and showcase new innovative technologies, and highlight entrepreneurs to develop emerging technologies that become the driving industries of the future.

San José continues to formalize other partnership efforts to advance the Green Vision goals, including, but not limited to:

- Lawrence Berkeley National Labs, Energy and Environment Technology Division – to help identify resources to support demonstration displays, workforce development training, and educational programming at the San José Environmental Innovation Center.
- The Bay Area EV Gov-2-Gov Coordinating Council – to develop a common regional strategic vision including goals, projections and principles regarding the deployment of electric vehicle charging infrastructure. As a result, San José is partnering with Coulomb Technologies, the ChargePoint America program, and the Metropolitan Transportation Commission (MTC) Climate Initiatives Program, to receive 52 electric vehicle charging stations, which will be primarily installed in downtown San José.

### ***Clean Tech Jobs***

San José and the surrounding region, continues to be a global leader in the clean tech economy. This has led to the attraction of \$7 billion in venture capital investment in Silicon Valley, and has created or expanded approximately 100 clean tech companies in this region. Although overall job growth has remained flat at the national and state level, there was a 2% increase in total employment in San José in 2011. Since 2007, 7,000 clean tech jobs have been created in San José – with energy efficiency, energy generation, and infrastructure accounting for over three fourths of these jobs. The City plays an active role in job creation in four primary ways:

- a. Partnering with the industry to drive emerging markets such as electric vehicle infrastructure and LED streetlights

- b. Enabling the testing of new technologies for other companies via demonstration partnerships with the City
- c. Using its Clean Tech Legislative Agenda to guide advocacy for specific legislation
- d. Working with employers, institutions of higher learning, apprenticeship programs, and other training providers to provide targeted training programs for careers in clean tech and the green economy

### *Cost Savings*

By leveraging the Energy Efficiency and Conservation Block Grant (EECBG) from the Federal Department of Energy, San José has been able to complete 49 energy audits to date and 26 energy projects on municipal buildings in 2011, generating approximately \$170,000 in cost savings and \$25,000 in rebates/incentives. These funds were deposited into the Energy Fund for use in FY 2011-12 to continue additional energy efficiency projects. Since its inception, over \$560,000 in rebates and incentives and \$320,000 in project cost savings have been deposited into the Energy Fund and utilized to support energy improvement projects in City Hall, fire stations, and community centers. However, to help bridge the significant General Fund gap in FY 2011-2012, approximately \$100,000 were redirected from the Energy Fund to the City's General Fund, resulting in a reduced ability to lower the City's energy consumption and provide ongoing savings to the General Fund. It is important to note that any further redirection of funds from the City Energy Fund will severely impact staff's ability to continue implementing future energy improvement projects.

In addition to energy efficiency improvements, approximately 1.4 million square feet of the City's municipal facilities are now Leadership in Energy and Environmental Design (LEED) certified green buildings. Although an exact number related to cost savings on these buildings is not known at this time, several third party studies show that green buildings, in addition to conserving natural materials and creating healthy indoor spaces, deliver long-term operational savings because of features such as optimal solar orientation, daylighting, smart lighting controls, energy efficient appliances, and water conservation systems.

### *2011 Key Accomplishments*

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

- **155** new Clean Tech jobs in 2011, **7,000** total clean tech jobs; over **\$7 billion** in total **venture capital invested** in Clean Tech companies in Silicon Valley, with **\$1.7 billion** invested in 2011 alone
- Energy efficiency measures implemented at City facilities have saved **\$170,000** in cost savings and **\$25,000** in rebates/incentives
- To date, **3,274 solar photovoltaic (PV)** systems with a total capacity of over **44 MW** have been installed in San José which is equivalent to **11,099 4 kW** residential systems
- Council approved agreement with SolarCity to install **solar at 28 City facilities** with total production potential of **4 MW**

- Over **5.4 million** square feet of certified green buildings completed to date, including **17 municipal** buildings totaling to **1.4 million** square feet
- Continuing to have the highest diversion rates in the nation including a **71%** overall diversion rate, **77%** multi-family, **84%** City facilities
- Over **10 miles** of new recycled water pipes have been installed and various facility improvements are underway including construction of the **Advanced Water Treatment Facility**
- **General Plan Update** was adopted by the San José City Council on **November 1, 2011**
- **40%** of City fleet on alternative fuel; fleet **GHG emissions** reduced by **32%** compared to 2003 baseline
- With the leadership of Our City Forest, planted **2,148 new trees**, opened a **community tree nursery**, and completed **over 60%** of the **street tree inventory** with the help of grants and AmeriCorps volunteers
- With San José as a key advocate, the California Public Utility Commission (CPUC) approved a Pacific Gas & Electric (PG&E) tariff pilot for network controlled energy efficient Light Emitting Diode (LED), **dimnable streetlights**; awarded contract to install **2,100** smart LED streetlights
- Over **\$5.4 million** in grant funding for **trails** and on street **bike** and pedestrian improvements
- **Trail Count** survey indicated a **5.7% increase** in usage along downtown's Guadalupe River Trail and San José continues to be **20% above** the national average in terms of commuting by bike

### ***2012 Priority Areas***

In light of the continued challenges related to the City's budget and reduced service levels, it will be difficult to maintain focus on Green Vision initiatives. However, as we have observed since the adoption of the Green Vision, investments in areas that have the potential to spur economic development and/or reduce long-term operational costs deliver big returns.

To continue to advance the Green Vision, it is important to lead by example, advocate for legislation and funding at the regional, State, and Federal levels, supplement limited City dollars with other financing mechanisms such as grants, modified fee structures and improvement districts, form strategic partnerships, and increase awareness and level of engagement in the community.

The report outlines work plans for each goal in the individual goal chapters while a comprehensive 2012 Work Plan is included at the end of the full report. Key Work Plan priorities are highlighted below:

- **Goal 1** Partner with industry leaders and regional advocacy groups on Clean Tech Legislative Agenda; partner with National Labs and identify resources to support demonstration displays, workforce development training, and educational programming at the San José Environmental Innovation Center

- Goal 2** Reduce municipal energy use by an additional 5%; use Federal, State and PG&E funding to expand energy efficiency education, audits and improvements in the community
- Goal 3** Finance solar installations on City facilities using Power Purchase Agreements and install solar at a minimum of 4 City facilities
- Goal 4** Conduct additional outreach and education for staff and development community related to Green Buildings
- Goal 5** Increase waste diversion from businesses and residents through the following programs: the new commercial system, the RecyclePlus recycling rewards pilot, Green Events Certification, and Go Green Schools Program; partner with Zero Waste Energy Development to begin construction of anaerobic digestion facility at 9 Par and Harvest Power to conduct feasibility study of gasification pilot
- Goal 6** Implement a Strategic Planning process to develop a shared vision amongst SBWR partners and guide the future of the program; partner with the Santa Clara Valley Water District to attain approval of regulatory permits and an Operations and Maintenance agreement for the Advanced Water Treatment Facility
- Goal 7** Develop a Council Implementation Policy for the Greenhouse Gas Reduction Strategy; prepare Urban Village Plans and revise the Zoning Ordinance to facilitate sustainable urban development in identified focused Growth Areas
- Goal 8** Collaborate with San José State University to launch Car Share program; install 52 electric vehicle charging stations primarily downtown and in City-owned garages
- Goal 9** Continue to work with Our City Forest to partner on opportunities and leverage resources, including assisting with the relocation of OCF offices; seek financing and grant opportunities to fund streetlight conversions; install 2,100 LED streetlights with smart adaptive lighting controls; launch first year of PG&E dimmable streetlight tariff pilot
- Goal 10** Start pavement of Lower Guadalupe River Trail and Highway 237 Bikeway Trail; expand on-street bike network by 10 miles, install 500 public bike parking spaces

In addition to the above priorities, staff will continue to track related Federal and State legislation, look for funding and partnership opportunities to advance 2012 Work Plan elements for all goals, and increase awareness of the Green Vision strategy.

### **PUBLIC OUTREACH**

- Criterion 1:** Requires Council action on the use of public funds equal to \$1 million or greater.  
**(Required: Website Posting)**

03/20/12

**Subject: Green Vision 2011 Annual Report and 2012 Work Plan**

Page # 8 of 8

- Criterion 2:** Adoption of a new or revised policy that may have implications for public health, safety, quality of life, or financial/economic vitality of the City. **(Required: E-mail and Website Posting)**
- Criterion 3:** Consideration of proposed changes to service delivery, programs, staffing that may have impacts to community services and have been identified by staff, Council or a Community group that requires special outreach. **(Required: E-mail, Website Posting, Community Meetings, Notice in appropriate newspapers)**

The attached report does not meet any of the three criterion listed above. However, continuous outreach is being done through the Green Vision website and through a multitude of community events, conferences, and media.

### COORDINATION

The implementation of the Green Vision is a collaborative effort involving staff from all City departments. City Departments and Offices that have been consulted with for the preparation of the report include the Office of Economic Development, the Office of the City Attorney, and the Departments of Environmental Services, Planning, Building and Code Enforcement, Public Works, Transportation, and Parks, Recreation, and Neighborhood Services.

### CEQA

Not a project.

  
Debra Figone  
City Manager

For questions please contact Ashwini Kantak, Assistant to the City Manager, at 535-8147.