



**Chandler • Arizona**

*Where Values Make The Difference*

**MEMORANDUM**

**City Manager – Council Memo MC09-004**

**DATE:** JANUARY 15, 2009

**TO:** MAYOR AND CITY COUNCIL

**THRU:** W. MARK PENTZ, CITY MANAGER 

**FROM:** JENNIFER MORRISON, SUSTAINABILITY MANAGER 

**SUBJECT:** CITY SUSTAINABILITY GOALS FOR 2009

Over the past year, the City organization has increased its focus on researching and implementing sustainable practices. This effort has become even more critical as City resources have become increasingly limited and as best practices throughout the country have provided ample evidence of the financial rewards of doing business in a more sustainable fashion. As you know, in early 2008, the City Manager encouraged the development of a new HPO Team called the Green Team. The Green Team began meeting to develop a plan to guide the City's activities toward using, developing and protecting the City's resources, both financial and natural, in the most efficient and effective manner.

Early in their process the Green Team made the decision to join ICLEI, the International Council for Local Environmental Initiatives. ICLEI is an organization comprised of over 500 U.S local governments that provides education and software to assist localities in improving the efficiency of their energy utilization. Through a process of data collection and analysis, the Green Team developed a more concise picture of the City's energy consumption and the resulting carbon footprint. The Team then took on the task of developing goals for the organization for reduction of energy consumption.

Since joining the City, I have had the opportunity to become a member of the Green Team and have been able to become familiar with the City's energy expenditures. In addition, I have met with representatives of all City departments to assess their ongoing and new goals in regards to sustainable practices. As a result of these activities, the Green Team developed Sustainability Goals for 2009, which are attached here for your review. The Executive Leadership Team approved these goals in early January. While the goals focus on reducing energy consumption and expense of City office buildings, facilities and vehicles, there are also goals that reflect staff's ongoing commitment to become informed about and develop plans to take advantage of emerging energy practices. All of the goals have at their core the objective of enhanced stewardship of the public's resources.

In the next several months, a number of activities will occur as we implement the sustainability goals in the organization. First, I will be meeting with staff in all departments to continue to raise the profile of the benefits of sustainability, particularly at this critical period in the City's budget. We will be providing staff with information regarding daily practices that can lower the City's energy consumption. We will also monitor our energy consumption on a monthly basis to determine our progress in meeting the goals.

Second, we have two employee teams that are meeting as suggested by the Green Team, to further examine practices to improve City efficiency. The Fleet Team is meeting to focus on ways to decrease annual fuel consumption, as well as to develop innovative solutions to streamlining the City's fleet. The Building and Facilities Review Team has been meeting and will develop a plan for implementing sustainability initiatives related to building operations and maintenance. These Teams, comprised of representatives of all departments, serve not only to develop improved efficiencies for the City, but also to serve as advocates in the departments of doing business in a more efficient and effective manner.

Third, a new component of Chanweb will be established for all employees by the end of January that will provide additional information and resources on becoming a more sustainable organization. Staff is also working to expand the sustainability content from Chanweb to the City's Internet website. Most recently, Planning and Development's Green Building Program and information about sustainability have been added to [chandleraz.gov](http://chandleraz.gov). It is our goal to, in short order, provide Chandler citizens with not only information about the City's efforts to become more environmentally viable, but also to provide resources and tips to becoming a more sustainable community.

Fourth, Public Library staff in coordination with the City Manger's Office recently applied for an ICMA grant funded by the Bill and Melinda Gates Foundation designed to develop a link between a key community issue and the Public Library. Named, "Growing Up Green in Chandler", this grant if funded, would provide an environmental literacy program through the Library which would emphasize the sustainability principles of reduce, reuse and recycle.

Finally, I have had the opportunity to participate in activities at the ASU School of Sustainability, which is a tremendous local resource. I am a member of the Solar Work Group, which is assisting in developing a valley wide network of members focused on the emerging opportunities provided by solar technology.

I am excited about the activities currently underway in the City and appreciate the opportunity to share this information with you. I share staff's enthusiasm in implementing these goals in the coming year. If you have any questions, please do not hesitate to contact me.

cc: Pat McDermott, Assistant City Manager

**Approved by Green Team  
12/29/08  
Approved By Exec. Lead.  
HPO 1/6/09**

## **City of Chandler Sustainability Goals For Calendar Year 2009**

The Sustainability Project Team known as the Green Team has been meeting to determine how the City of Chandler as an organization can improve its practices in the preservation and more efficient use of its resources. As an outcome of this process, the following goals have been established for calendar year 2009 to guide the City toward more efficient use of the public's funds and natural resources. This plan will guide the activities of the City of Chandler and its employees toward using, developing, and protecting resources in a manner that facilitates the enhanced stewardship of limited resources while securing the economic, social, and environmental health of future generations.

**Every employee will work to reduce the energy consumption and associated expense of City office buildings, facilities and vehicles. This includes:**

- Reducing electric consumption by 10% and natural gas consumption by 5% in City buildings and facilities by
  1. Reduce electrical consumption through energy conservation measures such as turning off lights, eliminating auxiliary electrical appliances (i.e. personal refrigerators, space heaters)
  2. Implementing a program to reduce the energy consumption of our computer equipment, printers and copiers
  3. Implementing other strategies as determined by City Departments and their employees
- Reducing water usage by City offices and facilities by 5%
- Reducing the amount of fuel utilized by the City's Fleet by 10%
- Reduce volume of trash hauled from City facilities by 5%

**We will educate our employees in implementing green practices. This includes:**

- Establishing Green Chanweb in January 2009 as a resource for all employees to become educated about the City's sustainability goals and practices
- Reeducating City staff on benefit of in-house recycling and reuse by
  1. Reestablishing in-house recycling program and reinvigorate in-house recycling campaign

2. Including a recycling plan in implementing all City-sponsored employee events
  3. Including a component on in-house recycling practices in new employee orientation
- Implementing a program to reduce use of paper throughout the organization by 15% by
    1. Reevaluating the types of printers we use
    2. Reviewing printing practices toward a goal of decreasing paper

**Initiate practices that create a more sustainable Chandler. The following activities are currently underway by the Departments indicated:**

- Evaluate the costs and benefits of utilizing recycled paper in the organization. Currently the Warehouse is not stocking recycled paper for regular copying purposes
- Complete Heat Island Mitigation Study with the ASU School of Sustainability (Public Works) including exploring alternate paving materials
- Study solar construction options for new City Hall and other City facilities (City Manager's Office)
- Rollout Planning's Green Building Program on-line in 2009 and establish programs for residents and commercial/industrial developers to learn about the program and green building opportunities (Planning and Development)
- Build a sustainability review (including a life cycle analysis) into discussion/considerations of all CIP projects (Management Services)
- Continue evaluation of methods to reduce costs of City streetlights
- Continue the Fleet Services Review Team whose goals are to review the current strategies and structure of fleet operations, develop cost-effective strategies for how to "green" the City's fleet; and increase awareness and a better understanding of how the organization's fleet usage contributes to the City's carbon footprint. (City-wide Team)
  1. Make recommendation on number of vehicles in the City's fleet
  2. Recommend appropriate types of vehicles for job functions in the City
  3. Recommend replacement cycle for vehicles
  4. Develop review team for all new vehicle purchases
  5. Review and make recommendations regarding fuel consumption of the City's fleet
  6. Develop and recommend citywide no-idling policy

7. Study alternate fuels in order to position the City to make an informed policy decision regarding their future use in the Chandler fleet
- Implement Portfolio Manager software to determine current energy efficiency of all City buildings and facilities- (City Manager's Office, Community Service and Municipal Utilities)
  - Study options for contracting with an energy audit and performance contracting firm (Building and Facilities and City Manager's Office)
  - Set a temperature standard for all City buildings and facilities toward the goal of reducing both energy costs and carbon footprint (City-wide Team)
  - Reduce energy consumption of Water Production facilities (Municipal Utilities)
    1. Establish consistent hydraulic grade lines
    2. Review the pump curves for all of pumps and are correcting mismatches starting with the worst first
    3. Establish a program to track the efficiency and performance of all of well pumps, will also review booster pumps
    4. Determined the relative costs to produce water from each of our water production facilities (looking at water resource costs, electricity, chemicals and treatment) and develop a priority of using the least expensive facilities first.
    5. Add variable speed drives to pumps at several key facilities.
    6. Expand or pressure zone split to more efficiently meet demands (right sizing)
    7. Designing additions/ upgrades to the water distribution system with the aid of computer models - also are using the model to develop more efficient operational strategies
    8. Generate power for water treatment with solar at facilities
  - Reduce energy consumption and improve green practices in Parks and open spaces (Community Services and Public Works)
    1. Public Works to explore utilizing solar powered trail lighting on the western canal
    2. Explore reuse of water for park irrigation
    3. Investigate expanding the green waste composting program in parks
    4. Reduce water usage of Parks through implementing various practices
    5. Investigate expanding recycling containers in Parks