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# MEMORANDUM

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Date: March 10, 2014

To: The Honorable Chair and Members  
Pima County Board of Supervisors

From: C.H. Huckelberry  
County Administrator

A handwritten signature in black ink, appearing to be "CH", is written over the printed name "C.H. Huckelberry".

Re: **Sustainable Action Plan for County Operations: Year Five Implementation Report Card for Fiscal Year (FY) 2012/13 and Five-year Summary for FYs 2008/09 through 2012/13**

I am pleased to provide the Board with the attached Year Five Implementation Report Card and Five-year Summary for the Sustainable Action Plan for County Operations (SAPCO) adopted by the Board in 2008 and based on the Pima County Sustainability Initiatives adopted by the Board in 2007 (Resolution No. 2007-84). These policies commit to *"creating and maintaining a sustainable community that promotes individual well-being and opportunity, sound resource conservation and stewardship, and a strong and diverse economy for all of its residents."* Since then, County departments and staff have implemented a diverse range of activities and programs designed to integrate sustainable practices into many aspects of County operations. Departments are adopting sustainability practices in their own unique and diversified operations, and opportunities to ensure savings and resource management opportunities are incorporated into their strategic plans.

As initially defined in the Sustainable Action Plan for County Operations, these efforts focus on alternative fuel vehicles, green building, renewable energy and energy efficiency, green purchasing, land conservation and management, waste reduction, water conservation and carbon footprint reduction. During the fourth year of implementation, in April 2012, the Health and Wellness Chapter was adopted by a unanimous vote.

This past year, Pima County completed the fifth year of implementation of the Sustainable Action Plan for County Operations and included within the Report Card is a 'Summary of Achievements' made during the five years of implementation of the 2008 SAPCO for FY 2008/09 through FY 2012/13. There have been notable successes. During this time, the County reduced costs and consumption and operated more sustainably and efficiently, which demonstrates the ongoing effectiveness of the County's sustainability policies and their implementation. Since the adoption of SAPCO, the County saved \$7,236,000 in energy costs through aggressive energy conservation methods, adherence to the adopted energy and water usage guidelines, and improved accounting methods to measure energy use.

The Honorable Chair and Members, Pima County Board of Supervisors  
Re: **Sustainable Action Plan for County Operations – Year Five Implementation Report Card  
and Five-year Summary**

March 10, 2014

Page 2

Updates to the Sustainable Action Plan for County Operations are conducted every five years, with smaller adjustments occurring as needed based on the results of an ongoing monitoring and evaluation of the programs. The next five-year Sustainable Action Plan will be brought to the Board for consideration and approval later this spring for implementation beginning July 1, 2014.

Sustainability Implementation Report Card for FY 2012/13 and Five-year Summary of Accomplishments

The attached Sustainability Report Card for FY 2012/2013 summarizes County operations and accomplishments and provides a detailed account of the progress the County is making in reaching 37 performance targets, or “success indicators,” as measured in past evaluations. Included in the Report Card is a summary of the accomplishments made during the five years of implementation.

Page 3 of the Report Card highlights several advances the County made in FY 2012/13 to increase the sustainability and efficiency of County operations. These include:

- Increased the number of environmentally friendly vehicles so that 44 percent of the County’s fleet vehicles are now flex-fuel, alternative fuel or hybrid vehicles.
- Added more than five megawatts of solar to its renewable energy portfolio.
- Expanded the recycling options for employees and the public and sent 46 percent less waste to the landfill than in 2008 and 31.5 percent less than FY 2011/12.
- Completed the Pima Emergency Communications and Operations Center. This facility meets 60 percent of the water efficiency credits to qualify for LEED Silver designation. The Center is part of Pima County’s Wireless Integrated Network, which will provide a regional communications center to operate during public safety emergencies.
- The Green Building Program, sponsored by the Development Services Department, offered 10 training sessions last year with 347 building professionals and members of the public attending, surpassing its target.
- Acquired 2,354 acres of land for open space conservation purposes.
- Increased equipment testing of 100 percent post-consumer recycled content paper to determine compatibility with County-operated copiers and printers.

The Honorable Chair and Members, Pima County Board of Supervisors  
**Re: Sustainable Action Plan for County Operations – Year Five Implementation Report Card  
and Five-year Summary**

March 10, 2014

Page 3

- Increased the number of times employees participated in one or more wellness programs by 64 percent over the baseline.
- Published its second greenhouse gas inventory.

In addition to identifying areas where the County made significant progress and achieved or surpassed the success indicators, this Report Card also includes “improvement plans” for areas where the County’s performance can be further enhanced.

The table below illustrates how the number of targets met or surpassed in Years 1 through 5 of the Sustainability Plan implementation, averaging more than 55 percent of meeting or surpassing success indicator targets.

**Sustainability Targets: Five-year Progress Summary.**

<b>Sustainability Topic</b>	<b>Year 1: Targets Met</b>	<b>Year 2: Targets Met</b>	<b>Year 3: Targets Met</b>	<b>Year 4: Targets Met</b>	<b>Year 5: Targets Met</b>	<b>Summary: Five-year Targets Met (percent)</b>
Alternative Fuel	2/4	1/4	1/4	2/4	2/4	40
Green Building	2/3	2/3	3/3	2/3	1/3	67
Green Purchasing	Initiated	4/6	4/6	5/6	5/6	75
Renewable Energy and Conservation	2/5	3/5	3/5	3/5	1/5	48
Waste Reduction	1/2	1/2	0/2	0/2	1/2	30
Water Conservation	1/6	1/6	Revised	3/6	3/6	33
Land Conservation	4/4	3/4	3/4	4/4	4/4	90
Carbon Footprint	Initiated	In Process	In Process	In Process	In Process	NA
Health/Wellness	NA	NA	NA	Initiated	2/7	In Process
<b>Targets* Met/ Surpassed</b>	<b>12/24 or 50 percent</b>	<b>15/30 or 50 percent</b>	<b>14/24 or 58 percent</b>	<b>19/30 or 63 percent</b>	<b>19/37 or 51 percent</b>	<b>55 percent</b>

\*The number of targets and indicators vary based on the implementation and adoption schedule.

The Honorable Chair and Members, Pima County Board of Supervisors  
Re: **Sustainable Action Plan for County Operations – Year Five Implementation Report Card  
and Five-year Summary**

March 10, 2014

Page 4

Five-year Summary of Accomplishments 2008 through 2013

Since 2008, the SAPCO has been successfully implemented through the collaboration of County departments and the dedicated and volunteer efforts of more than 200 County employees.

- Savings of \$7,136,000 in energy costs to Pima County.
- Production of 7 megawatts of renewable energy for use in County facilities.
- Acquisition of 27,354 acres of natural open space lands for conservation.
- Twenty-two County parks are now served by reclaimed water.
- Hybrid vehicles comprise 44 percent of the County fleet and 60 percent of the Sheriff's Department fleet.
- Solar OneStop Center opened in the Public Works Building.
- Employee alternative modes of transportation increased by 41 percent.
- Installation of 16 electric vehicle charging stations for public and employee use.
- LEED Silver standards achieved for all new County facilities over 5,000 square feet.
- Pima County awarded LEED for Homes provider status by US Green Building Council.
- Increase of 318 percent in purchase and use of "ecofriendly" office supplies.
- Waste sent to the landfills from County facilities reduced by 46 percent.
- Increased employee participation in health and wellness programs by 64 percent.

Pima County departments continue their commitment to achieving excellence in operational sustainability and efficiency through implementation of the Sustainable Action Plan for Pima County Operations, as reflected in the Report Card Year FY 2012/13 and Five-year Summary. These reports showcase the commitment, efforts, and successes of County employees and the community in enhancing our economy, environment and the people we serve.

CHH/mjk

Attachment

c: John Bernal, Deputy County Administrator for Public Works  
Nanette Slusser, Assistant County Administrator for Public Works Policy  
Linda Mayro, Director, Sustainability and Conservation

A large, vibrant sunflower with a yellow center and petals, set against a clear blue sky. The sunflower is the central focus of the top half of the page.

# Pima County Sustainable Action Plan for County Operations

Five Year Summary of Accomplishments 2008 – 2013

## Success Highlights

Since 2008, the Sustainable Action Plan for County Operations has been successfully implemented through the collaboration of County Departments and the dedication and volunteer efforts of more than 200 County employees.

- Savings of **\$7,136,000** in energy costs to Pima County.
- Production of 7 megawatts of **renewable energy** for use in County facilities.
- Acquisition of **27,354 acres** of natural open space lands for conservation.
- Some 22 County parks are now served by **reclaimed water**.
- **Alternative fuel vehicles** comprise 44% of County fleet and 60% of the Sheriff's fleet.
- **Solar One Stop Center** opened in Public Works Building.
- Employee **alternative modes** of transportation increased by 41%.
- Installation of 16 **electric vehicle charging stations** for public and employee use.
- **LEED Silver standards** achieved for all new County facilities over 5,000 square feet.
- Pima County awarded **LEED for Homes** provider status by U.S. Green Building Council.
- Increase of 318% of purchase and use of **"eco-friendly"** office supplies.
- **Waste sent** to landfills from County facilities reduced by 46%.
- Increased employee participation in **health and wellness** programs by 64%.

## Background and Introduction

In 2007 the Board of Supervisors adopted the Pima County Sustainability Initiatives, Resolution No. 2007-84. This far-reaching resolution promotes creating and maintaining a sustainable community that supports individual well-being and opportunity, sound resource conservation and stewardship, and a strong and diverse economy for all of its residents. The Pima County Board of Supervisors unanimously adopted the Sustainable Action Plan for County Operations (SAPCO) in August 2008 to implement the Sustainability Initiatives and in April 2012, the Board of Supervisors expanded the SAPCO by adopting the Health and Wellness Chapter.

Since 2008, County employees have taken on a diverse range of activities and programs designed to integrate sustainable practices into virtually all facets of the way Pima County government operates – from the cars we drive, to the energy and water we consume, to the construction of our buildings, to the products we purchase, to the way in which we view and handle our used materials, to improving employee health, wellness, and productivity. As a result, Pima County has made great strides in achieving its vision for operating more sustainably while achieving considerable cost savings. This document summarizes the achievements made while implementing the SAPCO from 2008 to 2013.

## 5 Year Summary of Achievements

### Fiscal Years (FY) 2008/2009 - FY 2012/2013

The annual SAPCO Report Cards offer more detailed information for each of the following focus areas or chapters.

- **Alternative Fuel Vehicles**

**County Fleet:** Fleet Services increased the number of vehicles in its fleet that are alternative fuel vehicles; 44% of the County fleet vehicles are now alternative fuel vehicles. The Sheriff's fleet is now made up of 60% alternative fuel vehicles.

**Alternative Modes:** Employees increased the percentage of trips using alternative modes of transportation for work commutes by 41% since 2010. The 2012 Employee Survey indicated that 27% of trips are made using alternate modes.

**Safety and Fuel Efficient Driving:** 100% of the employees who completed the Finance and Risk Management Department's online Defensive Driving

Course receive Driver Energy Conservation Awareness Training.

**Bike Share:** The Department of Transportation developed a bike sharing program for localized work trips to encourage bike use as a form of alternative transportation and to increase physical activity.

**Charging Stations:** Fleet Services and Pima County Public Library installed 16 electric vehicle charging stations at eight key locations within the community for the public and its fleet, helping to pave the way for a community-wide transition to cleaner fuels.

- **Green Building**

**LEED Silver Standard:** Facilities Management built all new occupied county facilities and new additions greater than 5,000 square feet to LEED Silver standards.

**LEED for Homes:** Development Services became the first public agency in the country to be awarded "LEED for Homes" provider status by the U.S. Green Building Council.

- **Green Purchasing**

**Eco-Friendly Products:** Employees increased the proportion of office supply dollars spent on eco-friendly products by 318% since 2008.

**Energy Star:** Facilities Management developed guidelines that require all new appliances purchased as part of construction/upgrade projects overseen by Facilities Management be Energy Star qualified.

**Eco-Friendly Contracts:** Facilities Management updated its janitorial service contracts to include non-toxic and environmentally friendly products.

**Recycled Paper Standards:** The Green Purchasing Sustainability Team in conjunction with the Pima County Print Shop and Procurement Department established a standard requiring all departments to purchase 30% post-consumer recycled printer, copier, and multi-purpose paper.

- **Land Conservation and Management**

**Open Space:** Acquired 27,354 acres of additional land for open space conservation.

**Monitoring Impacts:** Multiple departments collaborated to develop a mechanism to monitor the impacts of County building projects on cultural resources sites, designated riparian habitat, and the Conservation Lands System.

• **Waste Reduction**

**Landfill Waste Diversion:** Facilities Management expanded the recycling program from 10 to over 65 facilities and increased materials accepted for recycling. The County reduced the quantity of waste sent to landfills by 46% compared to the 2008 baseline. In addition, efforts were made to reduce waste and increase recycling and composting at events held at County facilities or in partnership with the County.

• **Renewable Energy and Energy Efficiency**

**Renewable Energy Portfolio:** The County brought 7 megawatts of renewable energy into production, more than tripling its renewable energy capacity. The County now receives approximately 14% of its electricity from renewable sources and has nearly reached its 2025 target.

**Energy Management:** Facilities Management implemented energy management software to monitor and evaluate the cost and consumption for water, electricity, and gas; helping the County optimize resource consumption and identify areas where additional improvements in efficiency can be achieved.

**Energy Efficiency:** Facilities Management improved the energy efficiency of facilities by implementing a range of energy efficiency and conservation measures that resulted in significant energy cost savings.

• **Water Conservation and Management**

**Regional Optimization Master Plan:** Regional Wastewater Reclamation Department developed a regional plan for the treatment, handling, and reuse of biosolids and biogas produced by its wastewater treatment system and for the modernization of energy facilities at wastewater treatment facilities.

**Reclaimed Water:** Natural Resources, Parks and Recreation increased the number of County parks served by reclaimed water by 120% from 10 to 22 parks, reducing the strain on the region’s ground water supply while providing recreation areas for the community.

• **Reducing the Carbon Footprint of County Government**

**Mitigation and Adaptation:** The County took a proactive role in quantifying and managing its greenhouse gas emissions and preparing itself for the future impacts of climate change.

**Monitoring Emissions:** The County completed its second greenhouse gas emissions inventory in 2010 and is in the process of compiling data for publishing its second report.

**Minimizing Emissions:** The County established measurable targets for reducing its emissions and implemented a number of strategies to meet these targets including the following:

- Sourcing 15% of electricity used by all County facilities from renewable resources by 2025;
- Using alternative fuels in at least 25% of fleet vehicles and “right-sizing” its fleet;
- Systematically upgrading facilities with energy-conserving equipment;

## 5 Year Summary – Energy Expenses and Net Savings

Fiscal Year	2007/2008 Baseline	2008/2009 (Year 1)	2009/2010 (Year 2)	2010/2011 (Year 3)	2011/2012 (Year 4)	2012/2013 (Year 5)	Five Year Total Net Savings
Cost	\$15,100,000	\$12,400,000	\$13,856,535	\$12,728,263	\$13,579,168	\$15,800,131	
Annual Savings (compared to baseline)		\$2,700,000	\$1,243,465	\$2,371,737	\$1,520,832	(\$700,000 above baseline)	
Savings to Date		\$2,700,000	\$3,943,465	\$6,315,202	\$7,836,034	\$7,136,034	<b>\$7,136,034</b>

4 (SAPCO) Summary of Accomplishments and Achievements FY 2007/2008 – FY 2012/2013

- Implementing design standards to improve energy efficiency in all new County occupied buildings and new additions greater than 5,000 square feet;
- Rehabilitating, repurposing and adaptively using existing and historic buildings to conserve the embedded resources and energy from their construction;
- Minimizing the quantity of waste it produces and landfills;
- Implementing green purchasing specifications; and
- Collaborating with Pima Association of Governments and other subject matter experts to develop climate change adaptation and mitigation strategies.

the spread of obesity and related chronic disease. These efforts were made possible by a Communities Putting Prevention to Work grant, funded by the American Recovery and Reinvestment Act of 2009. The chapter was unanimously adopted by the Board of Supervisors in April 2012.

**Employee Participation:** Employees increased participation in preventive lifestyle and chronic disease management programs by 64% compared to the baseline. Human Resources expanded the range of programs to promote and improve employee health and wellness.

• **Health and Wellness**

**Health and Wellness Chapter:** Human Resources, the Health Department, and the Office of Sustainability and Conservation developed the employee Health and Wellness Chapter for inclusion into the SAPCO to enhance employee wellness and prevent or reduce

**Employee Health Tracking:** Human Resources refined the methodology used to assess the health status of employees to improve health outcomes through targeted interventions, programs, and education.

**Accountability and Reporting**

Annual published report cards showcase successes and measurable progress on how the County is performing on specific “success indicators.” The success indicators include a measurable performance target that allows the County to track progress and help guide and improve performance, particularly in response to the availability of resources or evolving policies, technologies, and best practices. The County met or surpassed 54% of the targets.

**Sustainability Targets - 5 Year Progress Summary**

Sustainability Topic / Chapter	Year 1: Targets Met	Year 2: Targets Met	Year 3: Targets Met	Year 4: Targets Met	Year 5: Targets Met	Summary: Targets Met
Alternative Fuel	2/4	1/4	1/4	2/4	2/4	40%
Green Building	2/3	2/3	3/3	2/3	1/3	67%
Green Purchasing	Initiated	4/6	4/6	5/6	5/6	75%
Renewable Energy and Conservation	2/5	3/5	3/5	3/5	1/5	48%
Waste Reduction	1/2	1/2	0/2	0/2	1/2	30%
Water Conservation	1/6	1/6	Revised	3/7	3/7	29%
Land Conservation / Mgt.	4/4	3/4	3/4	4/4	4/4	90%
Carbon Footprint Reduction	Initiated	In Process	In Process	In Process	In Process	Not applicable
Health and Wellness	Not applicable	Not applicable	Not applicable	Initiated	2/7	In Process
<b>Targets* Met/Surpassed</b>	<b>12/24 or 50%</b>	<b>15/30 or 50%</b>	<b>14/24 or 58%</b>	<b>19/31 or 61%</b>	<b>19/38 or 50%</b>	<b>54%</b>

\*The number of targets and indicators vary based on the implementation and adoption schedule.

As a result of the SAPCO, Pima County also adopted the following procedures and standards and provided for appropriate staffing to further its sustainability policies and goals.

## Standards, Procedures, and Guidelines

**LEED Silver Buildings:** Adopted a building standard requiring that the County design and build all new occupied County buildings, including additions over 5,000 square feet, for which design is initiated after July 1, 2007, to achieve a minimum of LEED Silver certification level.

**Anti-Idling Procedure – Administrative Procedure 49-4:** Enacted to minimize idling in County vehicles.

**Recycled Paper Purchasing – Administrative Procedure 3-29:** This administrative procedure establishes a paper purchasing standard that requires all County departments purchase printer, copier, and multi-purpose paper that contains 30% post consumer recycled content, whenever possible.

**Energy Conservation Guidelines:** Implemented energy guidelines for its facilities to help increase conservation, improve efficiency, and reduce waste in its operations.

**Green Purchasing Specifications:** Adopted requirements into its Procurement Policy requiring that all County departments, when applicable, incorporate the objectives of Board of Supervisors Resolution 2007-84 into any set of specifications for the procurement of supplies, equipment, and services.

**2011-2015 Action Plan for Water Sustainability and Resolution No. 2010-16.** This project was led by the Regional Wastewater Reclamation Department in cooperation with the City of Tucson and has four interconnected elements: Water Supply, Demand Management, Comprehensive Integrated Planning and Respect for the Environment.

## Personnel Expertise

The County recognizes the importance of having subject matter experts on staff to achieve its sustainability goals. A small number of County staff, cooperating Departments, and currently more than 200 employee volunteers have successfully implemented the SAPCO. The County created three dedicated staff positions, the Sustainability Manager, the Sustainability Program Coordinator, and Energy Manager, to ensure implementation, monitoring, and program improvements.

The County developed expertise from within its operations to ensure successful implementation and encourage the full engagement of its workforce. Opportunities for employee participation include volunteering in various capacities.

**Steering Committee and Executive Committee:** Provides assessment and recommendations for the SAPCO implementation and future sustainability initiatives or directives from County Administration and the Board of Supervisors. The Committees are composed of senior management, subject matter experts, and staff directly involved in the implementation of the SAPCO.

## Saving Resources While Improving the Quality of Life for Residents

The Kino Environmental Restoration Project (KERP) is a prime example of how the County is improving the quality of life for its residents while maintaining the resources needed by future generations and saving taxpayer money. KERP combines the use of harvested stormwater and reclaimed water to support riparian habitat within the basin and to irrigate Kino Sports Complex ball fields plus landscaping at numerous buildings along Ajo Way. The vegetation and ponds at KERP consume 210 acre-feet of harvested stormwater annually, saving taxpayers more than \$1.56 million dollars since 2002 compared to the cost of reclaimed water. In addition, the excess stormwater diverted for sports complex and landscape irrigation has provided savings of \$425,000 compared to the cost of reclaimed water, or \$1.44 million compared to the cost of potable water.



**Sustainability (S)-Team Leads and S-Team**

**Members:** Employee volunteers serve as subject matter experts to assist in integrating the goals of sustainability into all facets of the way Pima County government operates, and contributes to the annual reporting and monitoring of the SAPCO initiatives.

**Green Purchasing Representatives:** Trained volunteers in nearly all Departments act as Green Purchasing Representatives for their Departments to identify resources for developing “green specifications” in their Department’s supply contracts and purchases.

**Eco-Champions:** Eco-Champions help coordinate recycling and conservation activities in their respective Departments and actively encourage participation in sustainable practices.

**Wellness Action Committee:** The existing Wellness Action Committee incorporated sustainability principles into its charter to assist with on-site wellness activities and encourage healthy behaviors to improve workforce productivity.

**Internal Programs:** County Departments are adopting sustainability into their own framework of unique internal operations and strategic plans. Departments and offices will reduce their operations and maintenance costs, reduce emissions and waste, enhance their sustainability leadership, and cooperate with other Departments and the public. In FY 2012/2013 the Regional Wastewater Reclamation Department created a formal unit, the Sustainable Energy Management Office, to coordinate key elements and become a leader within wastewater operations. Because each Department may have unique and diversified sustainable opportunities the County is creating an organization that is committed to achieving excellence in operational sustainability and efficiency.

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## Measuring and Tracking of Progress

**Sub-metered Buildings:** Facilities Management installed separate sub-meters on facilities that previously did not have electricity or gas meters. As a result it is now able to accurately track electricity and gas use in nearly all County facilities, enhancing its ability to manage energy consumption in individual facilities.

**Installed Energy Management Software:** Facilities Management purchased energy management software to manage the over 1,500 utility bills the County receives from over 20 different vendors each month. The software is designed to help Pima County measure, manage, and save on utility bills through efficient auditing, accounting and bill payment processes, energy analysis, benchmarking, and reporting.

**Installed Vehicle Monitoring Software:** Fleet Services installed software in County Fleet vehicles to monitor driver behavior, reduce idling, and reduce the number of miles traveled.

**Office Supply Tracking:** The Procurement Department developed a system to track the proportion of office supply dollars spent on “green” versus “non-green” products. The system helps the County monitor progress and improve product offerings.

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## Employee and Community Outreach

**New Employee Orientation:** The Department of Environmental Quality incorporated information about County sustainability programs into the Human Resources “New Employee Orientation” that includes the Travel Reduction Program, and other sustainable programs and opportunities.

**Employee Awareness:** Human Resources, the Office of Sustainability and Conservation, and Environmental Quality provided incentives and encouraged participation in a number of contests, campaigns, and employee-only events to raise awareness and encourage employees to engage in sustainable and healthy practices.

**Employee Vehicle Operators:** Finance and Risk Management developed a training module that demonstrates how to drive more efficiently and reduce vehicle miles traveled. All new employees are required to receive this training before being permitted to operate a County vehicle.

**Solar One Stop:** Development Services, the Office of Sustainability and Conservation, and the County Administrator’s Office partnered with the City of Tucson to open the Solar One Stop Center in the lobby of the Public Works building and created the website [www.Solaronestopaz.org](http://www.Solaronestopaz.org).

**Green Pueblo Map:** Pima County joined with local partners to showcase our community's sustainability accomplishments and assets. This project encourages residents to make their mark by nominating sites for the dynamic ever-changing virtual map and be part of the growing international Green Map movement.

**Pima Comprehensive Plan:** The principles for sustainability are being imbedded into all aspects of the way Pima County government operates. The 10-year update of the Pima Prospers Comprehensive Plan is in process and will serve as a guide to the region's growth, conservation and community design for decades to come. The update includes the 3 pillars of sustainability – Social (quality of life, livable community), Environment (land use and conservation, water and energy resources), and Economic Prosperity. Pima Prospers' vision is to create a vibrant future for our region, and address how Pima County will:

- Both use and conserve our land, water and energy resources, most notably in our unincorporated areas on private and state trust land
- Fuel our economy
- Make efficient use of our existing infrastructure
- Enrich our quality of life
- Create healthy communities
- Respond to the needs of our rural communities and settlements, each unique.

## Awards

**Innovation in Sustainability Award of Excellence:** Pima County received the National 2009 Innovation in Sustainability Award of Excellence from the Association for Operations Management for its development of the Sustainable Action Plan for County Operations. The award recognizes organizations for their achievements in minimizing the impact of supply-chain activities on the environment and for keeping sustainability at the forefront of operations management.

**Pima County Employee Recognition and Sustainability Summit:** In 2012, eight employees and their Departments were recognized by the County Administrator for their outstanding contributions to the SAPCO. At the first Pima County Sustainability Summit for employees, over 70 attendees representing most Departments heard presentations from colleagues and Mr. Huckelberry.

### **Environmental Stewardship Award of Merit:**

Pima County received the 2013 Southern Arizona Environmental Stewardship Award of Merit from the nonprofit Arizona Forward. The County was recognized for demonstrating dedication to environmental sustainability through its implementation of the SAPCO.

## Alternative Transportation Infrastructure

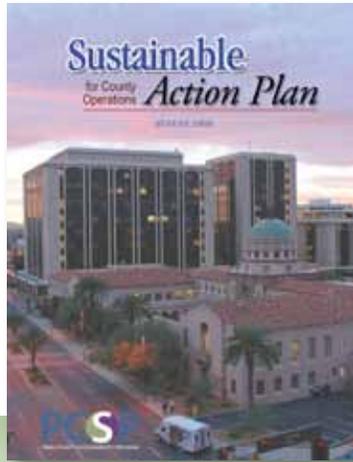
Pima County is developing The Loop around metro Tucson with links to Marana, Oro Valley, and South Tucson. Pima County residents and visitors on foot, bikes, skates, and horses can enjoy the more than 100 miles of shared-use paths that have already been completed. If it doesn't have a motor, it's good to go on The Loop. When completed, The Loop will total 131 miles and connect the Rillito, Santa Cruz, and Pantano River Parks with the Julian Wash and Harrison Greenways.

## Fiscal Sustainability and Environmental Stewardship

By choosing to make its operations more sustainable through the passage of the Sustainability Resolution and adoption of the Sustainable Action Plan, the County has demonstrated true leadership in helping to ensure that both current and future generations can meet their needs. The SAPCO has served as a vehicle for ensuring the County's fiscal sustainability while promoting environmental stewardship.

Through the initiatives these documents set forth, the County has made significant strides in making its operations more sustainable. Through energy cost savings and water conservation, Pima County continues to operate in a lean and efficient way while creating and retaining jobs, improving employee health, reducing and managing waste more effectively, and protecting and preserving our natural environment for future generations.

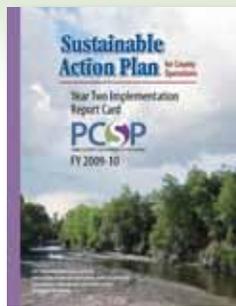




**Sustainable Action Plan  
for County Operations**



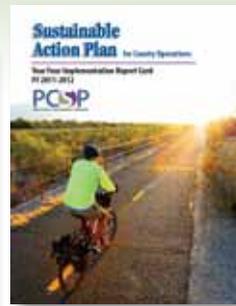
**FY 2008-2009**



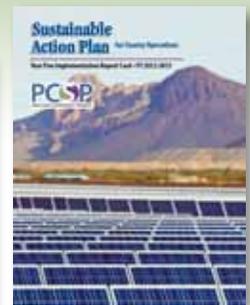
**FY 2009-2010**



**FY 2010-2011**



**FY 2011-2012**



**FY 2012-2013**



***Pima County Board of Supervisors***

Ally Miller, District 1  
Ramón Valadez, District 2  
Sharon Bronson, Chair, District 3  
Ray Carroll, District 4  
Richard Elías, District 5

***County Administrator***  
Chuck Huckelberry

*Comments and suggestions are always welcome and may be directed to the Pima County Sustainable Steering Committee, attention Robin Johnson, Sustainability Manager, at robin.johnson@pima.gov or (520)724-9492.*

**www.pima.gov**



*This publication is printed on paper made from 55% recycled fiber content, with 30% post-consumer waste paper, in accordance with Sustainable Action Plan success indicator number 12.*

# **Sustainable Action Plan** for County Operations

**Year Five Implementation Report Card • FY 2012-2013**



## Our Progress in Action

The Pima County Board of Supervisors unanimously adopted the Sustainable Action Plan for County Operations (SAPCO) in August 2008. In April 2012, the Board of Supervisors expanded the Sustainable Action Plan by adopting the Health and Wellness Chapter addendum.

Since 2008, staff has taken on a diverse range of activities and programs designed to integrate sustainable practices into virtually all facets of the way County government operates – from the cars we drive, to the energy and water we consume, to the construction of our buildings, to the products we purchase, to the way in which we view and handle our “used” materials, to improving employee health, wellness, and productivity. This Sustainability Report Card charts the 2008 Action Plan’s fifth year of implementation.

In all, County Departments tackled 56 action items programmed for FY 2012/2013, resulting in significant accomplishments in waste reduction, energy conservation, green building, renewable energy, land conservation and management, green purchasing, water conservation and management, and employee health and wellness.

The report card showcases some of those successes and provides feedback to County Supervisors, staff, and the public on how the County is performing on 37 specific “success indicators.” The success indicators include a measurable performance target that allows the County to track its progress during each year of the five-year action plan. They also help guide the County in areas where it strives to improve its performance, particularly in response to the availability of resources or evolving policies, technologies, and best practices.

To view or download copies of the 2008 SAPCO for County Operations or this Sustainability Report Card, please go to [www.pima.gov](http://www.pima.gov) and view the Sustainability Programs Division page. Comments and suggestions are always welcome and may be directed to the Pima County Steering Committee, attention Robin Johnson, Sustainability Manager, at [robin.johnson@pima.gov](mailto:robin.johnson@pima.gov) or (520) 724-9492.

## Sustainability Targets - 5 Year Progress Summary

Sustainability Topic / Chapter	Page Number	Year 1: Targets Met	Year 2: Targets Met	Year 3: Targets Met	Year 4: Targets Met	Year 5: Targets Met	Summary: Targets Met
Alternative Fuel	6	2/4	1/4	1/4	2/4	2/4	40%
Green Building	7	2/3	2/3	3/3	2/3	1/3	67%
Green Purchasing	9	Initiated	4/6	4/6	5/6	5/6	75%
Renewable Energy and Conservation	10	2/5	3/5	3/5	3/5	1/5	48%
Waste Reduction	13	1/2	1/2	0/2	0/2	1/2	30%
Water Conservation	15	1/6	1/6	Revised	3/7	3/7	29%
Land Conservation / Mgt.	18	4/4	3/4	3/4	4/4	4/4	90%
Carbon Footprint Reduction	19	Initiated	In Process	In Process	In Process	In Process	Not applicable
Health and Wellness	20	Not applicable	Not applicable	Not applicable	Initiated	2/7	In Process
<b>Targets* Met/Surpassed</b>		<b>12/24 or 50%</b>	<b>15/30 or 50%</b>	<b>14/24 or 58%</b>	<b>19/31 or 61%</b>	<b>19/38 or 50%</b>	<b>54%</b>

*\*The number of targets and indicators vary based on the implementation and adoption schedule.*

# Sustainability Success Stories

Year Five

**As a result of the combined efforts of multiple Departments, thousands of dedicated staff, and the support of County leadership, Pima County achieved the following sustainability successes in FY 2012/2013:**

- Increased the number of environmentally friendly vehicles so that 44% of the County's fleet vehicles are now flex-fuel, alternative fuel, or hybrid vehicles.
- Added more than 5 megawatts (MW) of solar to its renewable energy portfolio.
- Expanded the recycling options for employees and the public; and sent 46% less waste to the landfill than in 2008 and 31.5% less than FY 2011/2012.
- Completed the Pima Emergency Communications and Operations Center. It meets 60% of the water efficiency credits to qualify for LEED Silver designation. The Center is part of Pima County's Wireless Integrated Network that will provide a regional communications center to operate during public safety emergencies.
- The Green Building Program, sponsored by Development Services, offered ten training sessions last year with 347 building professionals and members of the public attending, surpassing its target.
- Acquired 2,354 acres of land for open space conservation purposes.
- Increased equipment testing of 100% post-consumer recycled content paper to determine compatibility with County-operated copiers and printers.
- Increased the number of times employees participated in one or more wellness programs by 64% over the baseline.
- Published its second greenhouse gas inventory.



**On the Cover:** The Prairie Fire Solar Plant came online in April 2013, and is located on 43 acres of Pima County land southwest of Tucson. The land has been leased to TEP in order to build, own and operate a 5 MW photovoltaic electricity generating facility. The facility is expected to generate approximately 9,000 MWh per year during the 20-year contract term. This amount represents about 8.2% of the electricity purchased and used by Pima County from TEP.

In addition to the environmental benefits of reducing dependence on coal, gas, and fossil fuels the agreement also provides financial benefits by avoiding rate increases in the energy portion of our contract term. Pima County's rate at the time of the agreement, June 5, 2012, was \$0.093440/kWh. The contract freezes about 36% of the energy portion of the rate at \$0.034086/kWh for the term of the agreement.

## Report Card Legend



**Achieved Target**



**In Progress**



**Not Met, But Shows Progress**



**Not Met**

# Noteworthy Accomplishments

In October of 2012 the Sustainability Program administered the first Employee Sustainability Survey to gain a better understanding of how the County's sustainability efforts have impacted employees' behaviors at work in implementing the Action Plan and at home. In addition, the survey was designed to gauge employee knowledge and interest in sustainability issues in order to improve communications and programming aimed at employees. Below is a summary of the survey results, which was completed by 1,623 employees over the course of the month. A complete copy of the survey results and open-ended comments are on file with the Sustainability Program Manager and available for review.

## Key results from the 2012 Employee Sustainability Survey:

- 42% of employees responded "yes" when asked if they were familiar with the 2008 Sustainable Action Plan for County Operations (58% responded "no").
- Over 60% of employees responded that reducing waste (63.8%), encouraging recycling (66.1%), and designing new buildings to conserve water and energy use (61.9%) were "very important" elements of workplace sustainability to them.
- Over 50% of employees responded that reducing energy use (57.7%), reducing water use (58.2%), encouraging healthy lifestyle behaviors (52.1%), and conserving natural and cultural resources within Pima County (55.6%) were also "very important" elements of workplace sustainability.

- Over half of all respondents either agreed or strongly agreed that their office actively promoted the following: recycling (72.4%), energy efficiency (58.4%) and healthy lifestyle behaviors (60%). Only 42% of respondents agreed or strongly agreed that their office encourages green purchasing.
- 42.7 % of respondents agreed or strongly agreed that they have adopted sustainable behaviors at work due to information they learned on the job, while 38.5% reported they have adopted sustainable behaviors at home due to information they learned on the job.
- Over half of all respondents reported that they "frequently" or "always" did the following activities to conserve resources at work: recycle used products (75.2%), turn off computer monitor before leaving (72.7%), use reusable plates, cups, utensils, etc. (62.9%), and turn off lights when not in use (82.6%).

## Sustainability Summit for Employees

On November 7, 2012, the County Administrator's Office and the Office of Sustainability and Conservation held the first Pima County Sustainability Summit for employees.

The Summit was held to gather the Sustainability Teams and others to highlight the goals, successes, and challenges of implementing the Action Plan. The four-year mark proved to be a time for employees to re-energize teams and the sustainable programs.

## Employee Recognition:

The County Administrator recognized these employees for their outstanding contributions to implement the Sustainable Action Plan for County Operations.



## Employee, Department

## Target or Focus Area

Karen Wilhelmsen, Environmental Quality	Alternative Fuels/Travel Reduction
Carmine DeBonis, Development Services	Green Building
Robin Samitz, Library	Green Purchasing
Marc Lynn, Facilities Management	Renewable Energy and Conservation
Mandy Armenta, Finance	Waste Reduction
Natural Resources, Parks and Recreation Operations Division	Water Conservation and Management
Kerry Baldwin, Natural Resources, Parks and Recreation	Land Conservation and Management
Charles Casey, Community Services, Employment and Training	Carbon Footprint Reduction
Danielle Cariglio, Office of Sustainability and Conservation	Health and Wellness
Nicole Fyffe, Administration	Sustainable Program Steering Committee

### **Department Recognition**

The **Pima County Public Library** was also recognized for their outstanding commitment and efforts to advance the goals of the Pima County Sustainability Program. The Library system ensures that each branch has an active Eco-Champion and that all purchase requests get a thorough green review for product choice and order consolidation. In June 2013, the Pima County Public Library was named top innovator by the Urban Libraries Council for the library public nurse program. This inspiring program is a cooperative effort with the **Pima County Health Department** that brings health care and information to the public and makes our libraries safer and more welcoming at the same time.

County Departments and employees are introducing initiatives to incorporate the elements of sustainability into the framework of their internal operations. In FY 2012/2013 the **Pima County Regional Wastewater Reclamation Department** created a formal unit, the Sustainability and Energy Management Office, to manage and coordinate several key elements within its wastewater operations. These areas include Biosolids, Energy Management (Energy Conservation and Renewable Energy), Nutrient Management, and Research and Technology.

Several Departments invested in recycling bins for work sites and the public demonstrating a commitment to improving their recycling collection.

### **Areas in Need of Additional Focus for FY 2012/2013**

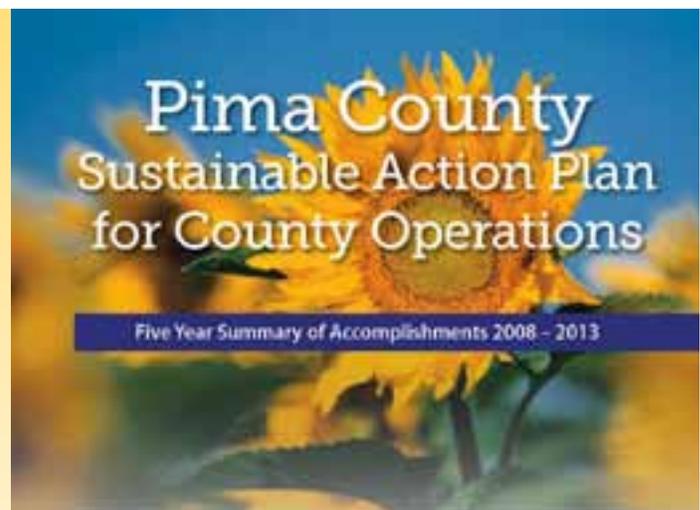
The annual report cards help Pima County identify areas where solid sustainability advances are being made, as well as areas in need of more attention. Because the Sustainable Action Plan for County Operations is intended to be adaptive and evolve over time based on changing conditions, knowledge and technologies, staff continues to evaluate the relevance and appropriateness of each indicator and target. The end result is the evolution of a Sustainable Action Plan, and a County organization that is committed to achieving excellence in operational sustainability and efficiency.

No major modifications were recommended this year since staff is in the process of updating the five-year plan. The revised 2014 SAPCO will be presented to the Board of Supervisors in 2014 for adoption and implementation in FY 2014/2015.

### **Success Highlights**

Since 2008, the Sustainable Action Plan for County Operations has been successfully implemented through the collaboration of County Departments and the dedication and volunteer efforts of more than 200 County employees.

- Savings of \$7,136,000 in energy costs to Pima County.
- Production of 7 megawatts of renewable energy for use in County facilities.
- Acquisition of 27,354 acres of natural open space lands for conservation.
- Some 22 County parks are now served by reclaimed water.
- Alternative fuel vehicles comprise 44% of the County fleet and 60% of the Sheriff's fleet.
- Solar One Stop Center opened in Public Works Building.
- Employee alternative modes of transportation increased by 41%.
- Installation of 16 electric vehicle charging stations for public and employee use.
- Waste sent to landfills from County facilities reduced by 46%.



- LEED Silver standards achieved for all new County facilities over 5,000 square feet.
- Pima County awarded LEED for Homes provider status by U.S. Green Building Council.
- Increase of 318% of purchase and use of "eco-friendly" office supplies.
- Increased employee participation in health and wellness programs by 64%.

1



**Success Indicator: Number of Environmentally Friendly Fleet Vehicles**

**Responsible and Supporting Departments:** Fleet Services, All Departments

**Target:** 100 vehicles, or 25% of vehicle fleet, by 2008; 30% of the fleet by 2009; and 50% of the fleet by 2017 (excluding Sheriff's vehicles)

**Score/Progress Report:** The County fleet totals 881 non-Sheriff vehicles; 31% are flex fuel or hybrid vehicles. The Sheriff's fleet totals 682 vehicles; 60% are flex fuel or hybrid vehicles. In total, 44% of all County fleet vehicles are environmentally friendly. Fleet Services will continue to work toward achieving the goal of making half of the County's fleet environmentally friendly by 2017.

2a



**Success Indicator: Education of County Employees: Drivers Training**

**Responsible and Supporting Departments:** Fleet Services, Risk Management, Information Technology

**Target:** 100% of the employees who completed the County's Online Defensive Driving Course receive Driver Energy Conservation Awareness Training. Risk Management has taken several measures during FY 2012/2013 to ensure that all County drivers are compliant with the triennial driver training requirement. If it is discovered that the employee is not compliant with the training, Risk Management contacts the employee to assist with bringing them into compliance.

2b



**Success Indicator: Education of County Employees**

**Responsible and Supporting Departments:** Environmental Quality, Human Resources, Information Technology

**Target:** Articles promoting travel reduction, alternative fuel vehicles and fuel-efficient driving techniques published in employee newsletters and on County websites.

**Score/Progress Report:** Resources were provided to employees regarding transit, carpooling, vanpooling, bicycling and walking for commutes via presentations, emails, literature, and website. Employees were encouraged to use bicycles from the Pima County Department of Transportation bike share program and alternative fuel fleet vehicles for work-related trips, and received information on ways to drive more fuel-efficiently. Trip Reduction Program presentations were delivered to employees by the Department of Environmental Quality during New Employee Orientations throughout the year. During FY 2012/2013, 422 employees attended, which represents a 70% increase since FY 2008/2009.

3



**Success Indicator: Participation of County Employees in Trip Reduction Programs**

**Responsible and Supporting Departments:** Environmental Quality, Human Resources, Information Technology

**Baseline:** Historical participation rate of 25%. 2010 participation rate: 19.2%, 2012 participation rate: 27%

**Target:** Achieve a minimum of 30% participation by FY 2010

**Score/Progress Report:** The next employee survey will take place in May 2014. Data for this target will be available after July 2014.

**Alternative Fuel Success Stories:**

- In FY 2012/2013 the Board of Supervisors approved an increase to the bus subsidy for employees. Eligible employees wishing to purchase a pre-tax Sun Tran SunGo card are entitled to one 50% subsidy offset per month.
- The REAP (Reduced Emissions & Air Pollution) Commuter Rewards Program was developed by Environmental Quality to recognize and reward employees for using active and alternate modes of transportation, and to encourage employees to try them if they haven't already.



4



**Success Indicator: Attendance at Green Building Educational Series**

**Responsible and Supporting Departments:** Development Services, Facilities Management

**Target:** Minimum of 20 in attendance

**Score/Progress Report:** The Green Building Program offered ten training sessions last year to over 250 building professionals and members of the public.

5



**Success Indicator: LEED Accreditation of County Employees**

**Responsible and Supporting Departments:** Development Services, Facilities Management

**Target:** Minimum of 14 Leadership in Energy and Environmental Design (LEED) Accredited Professionals by 2010.

**Score/Progress Report:** During FY 2012/2013 Development Services and Facilities Management reported no additional staff received LEED accreditation. One Development Services employee has achieved a Home Energy Rating System (HERS) Rater Certification. This allows the Department to audit the provisions of the 2012 energy code and provides improved service to LEED for Homes customers.

**Improvement Plan:** In Year Four an improvement plan was proposed that would recognize and incentivize staff to become LEED accredited. This improvement plan was not implemented in FY 2012/2013.

6



**Success Indicator: Percentage of LEED Silver-Certified Buildings**

**Responsible and Supporting Departments:** Development Services, Facilities Management

**Target:** 100% of all new occupied County-funded buildings and 100% of all building additions greater than 5,000 square feet

**Score/Progress Report:** The County is now proceeding with a majority of the tenant improvements in the Pima County Public Service Building, located downtown on Stone and Toole, with the exception of the 6th floor. Multiple changes in occupants as well as design have occurred within the past year. The disjointed and changing design has made LEED certification for the tenant improvements fiscally impossible. However, the project has still been engineered and specified utilizing sustainable and energy efficient materials and processes. The County will pursue LEED certification for the empty shell office building under LEED Core & Shell criteria.

**Green Building Success Stories:**

- Pima County's Community Development and Neighborhood Conservation Department received a \$22 million Neighborhood Stabilization Program grant from the Department of Housing and Urban Development in 2010. The County continues to collaborate with the City of Tucson and seven local nonprofits to make foreclosed and vacant homes energy efficient, available, and affordable in a specified target area.
- In FY 2012/2013, Pima County's Green Building Program partnered with a local family-owned construction business and a nonprofit to create jobs and turn a vacant, foreclosed home into a duplex that achieved the "greenest" possible rating for energy and water efficiency – Emerald.
- LEED Platinum certification was awarded to the Sunnyside Pointe affordable senior housing project. Sunnyside Pointe is a 90-home affordable senior housing project. The project team initially targeted the LEED silver certification level. After working with the Pima County Green Building Program, the team realized that it could achieve Platinum level certification within its budget.



### **Green Building Success Stories:**

- Since 2008, the County has registered over 900 homes in the LEED for Homes system.
- Pima County won the national Excellence in Energy Code Compliance Award in the large jurisdiction category at the International Code Council annual conference in Portland on October 22, 2012. The award criteria was based on jurisdictions' track record with energy code compliance, the relationship and interaction with local energy utilities, focus on inspection compliance, and deployment of energy code programs: Pima County's Regional Residential Green Building Rating System (discontinued in 2013), LEED for Homes, and the Net-Zero Energy Standard. The award highlights the excellent policies supported by County Administration, adopted by the Board of Supervisors and implemented by Building Safety staff.
- The U.S. Green Building Council awarded Sentinel Plaza LEED Gold Certification for achievement in green homebuilding. Sentinel Plaza is a new, energy-efficient independent senior apartment building for low-income seniors and was built at \$110 per square foot. The site is just west of downtown Tucson in a new transit-oriented district that is certified Gold under LEED for Neighborhood Development. The six-story building is the first of its height constructed out of Integra™ Block, an insulated, locally produced, post-tensioned concrete block system. The project's tax credit funding source required the design/build team to prove the system's efficiency, which passed with flying colors. Every resident has a one-bedroom apartment. In addition, common areas like the fitness center, gathering room, and library are powered by a 128kW roof-top PV array with occupancy sensor-controlled common area lighting. Residents' utility usage is kept low through the use of passive shading devices and efficient windows, appliances and HVAC systems.

Water-efficient fixtures and irrigation contribute to the sustainable features of this durable desert dwelling. Sentinel Plaza affirms urban living can work for seniors. Residents have access to bus and streetcar lines, the University of Arizona, downtown, senior centers in the adjacent neighborhood, and The Loop—a shared-use path system that provides open space and recreation opportunities.



<p>7</p>  <p>Achieved</p>	<p><b>Success Indicator: New and Existing Contracts Include “Green” Specifications Pursuant to Sustainable Action Plan, Activity No. 8</b></p> <p><b>Responsible and Supporting Departments:</b> Procurement, All Departments</p> <p><b>Target:</b> 100% of new contracts to include green specifications by January 2009; all contracts in subsequent years to include green specifications whenever applicable. 100% of existing contracts updated with green specifications, as applicable, by June 2010.</p> <p><b>Score/Progress Report:</b> Departments have affirmed general conformance when establishing new and renewing existing contracts.</p>
<p>8</p>  <p>Achieved <b>SURPASSED!</b></p>	<p><b>Success Indicator: Percentage of Green Products Purchased on the Staples Website</b></p> <p><b>Responsible and Supporting Departments:</b> Procurement, All Departments</p> <p><b>Baseline:</b> 9.1% of products (= \$170,844)</p> <p><b>Target:</b> 18% of products purchased in FY 2009 / 2010</p> <p><b>Score/Progress Report:</b> County Departments spent an average of 38% of their office supply budget on eco-friendly purchases. This is an increase of 4 percentage points over last year.</p>
<p>9</p>  <p>Achieved</p>	<p><b>Success Indicator: Purchase of ENERGY STAR™ Rated Appliances and Equipment</b></p> <p><b>Responsible and Supporting Departments:</b> Facilities Management, Procurement, All Departments</p> <p><b>Target:</b> 100% of appliances and equipment purchased to meet ENERGY STAR™ standards by June 2010</p> <p><b>Score/Progress Report:</b> All new appliances are ENERGY STAR™-rated when purchased as part of a construction/upgrades project that is overseen by Facilities Management.</p>
<p>10</p>  <p>Achieved</p>	<p><b>Success Indicator: Use of Non-toxic Products for Janitorial Services</b></p> <p><b>Responsible and Supporting Departments:</b> Facilities Management</p> <p><b>Target:</b> 100% of janitorial service contracts to be updated with non-toxic and environmentally friendly product specifications in 2010</p> <p><b>Score/Progress Report:</b> All janitorial contracts for Pima County require the use of non-toxic and environmentally friendly product specifications. Additionally, FY 2012/2013 welcomed another building to the non-toxic cleaning realm. Currently three of the County’s buildings are being cleaned in accordance with the “green cleaning” requirements of LEED certification.</p>
<p>11</p>  <p>Achieved</p>	<p><b>Success Indicator: Employees with Purchasing Responsibilities Attend at least One Green-Purchasing Training Session a Year</b></p> <p><b>Responsible and Supporting Departments:</b> Procurement, All Departments</p> <p><b>Target:</b> Employees with purchasing responsibilities to attend at least one green purchasing training session a year, regardless of whether it is offered by the Department Trainer or another Department. This will provide Departments with more flexibility in acquiring the training.</p> <p><b>Score/Progress Report:</b> Procurement provided online training to assist employees with purchasing responsibilities in understanding how to select items that are considered green or eco-friendly options for the Green Purchasing effort. Departments have affirmed staff’s participation in the online training.</p>
<p>12</p>  <p>Not Met, But Shows Progress</p>	<p><b>Success Indicator: Purchase of Recycled and/or Forest Stewardship Council Paper</b></p> <p><b>Responsible and Supporting Departments:</b> Procurement, All Departments</p> <p><b>Target:</b> All Departments to purchase 30% post-consumer recycled paper</p> <p><b>Score/Progress Report:</b> 75% of the paper purchased met the 30% post-consumer recycled content target.</p> <p><b>Improvement Plan:</b> In FY 2012/2013 the County made significant progress in moving toward integrating 100% recycled content paper into its paper supply. The County worked with its office supply provider to secure pricing for 100% recycled content paper that is equal to the current pricing rate for 30% recycled content paper. Additionally, it began piloting the use of 100% recycled content paper in multi-function printers in some of its Departments. As of yet, no complications have arisen as a result of the change. In accomplishing these two tasks, the County has eliminated the two major concerns surrounding 100% recycled content paper, cost and functionality. The County plans to continue its assessment of 100% recycled content paper in the hope that it can be more widely integrated into its operations.</p>

13



Not Met

**Success Indicator: County Expenditures for Energy**

**Responsible and Supporting Departments:** Facilities Management, All Departments

**Baseline:** Energy expenditures for FY 2007/2008 (\$15.1 million)

**Target:** Energy expenditures do not exceed \$15.1 million

**Score/Progress Report:** In FY 2012/2013 the County spent \$700,000 more than in the base year of 2008. These costs include electricity and natural gas used throughout County operations. This is the first year in five years that energy costs were higher than the base year of 2008. However, over the last five years the County experienced a total net savings of \$7,136,034 in energy costs compared to the 2008 baseline as a result of the initiatives outlined in this chapter. While a number of factors contributed to an increase in overall cost over the last year, the two primary contributing factors included major infrastructure improvements to treat wastewater and improve effluent water quality and an 11% increase in the average unit cost the County pays for energy. With this infrastructure now in operation, the County continues to work diligently to conserve energy, improve efficiency, and contain operating costs.

FY 2012/2013 Total energy expenditures: \$15,800,131

Electricity: \$13,413,140

Natural Gas: \$2,386,991

14



In Process

**Success Indicator: Energy Consumed by County Buildings and Facilities**

**Responsible and Supporting Departments:** Facilities Management

**Baseline:** Electricity use in FY 2008/2009 (50.16 MW or 100,327,840 kWh)

**Target:** This indicator is not identifiable at this point. The target will be identified once one year's worth of data is recorded in the energy management software.

**Score/Progress Report:** The energy management software has been reliably importing utility bill data since January 2013. In January 2014, the energy management software will have one complete year of data, which will be utilized to determine cost and consumption for water, electricity and gas. This will help the County identify areas where additional improvements in efficiency can be achieved; and enhance accuracy in the tracking and calculation of the County's carbon footprint.

15



Achieved

**Success Indicator: LEED Silver Energy Credits in County Projects**

**Responsible and Supporting Departments:** Facilities Management

**Baseline:** Projects designed after June 30, 2008

**Target:** All new buildings obtain a minimum of 65% of available energy credits in LEED-New Construction (NC)

**Score/Progress Report:** One new construction project was completed in FY 2012/2013. The Pima Emergency Communications and Operations Center on 22nd Street was constructed to LEED Silver standards and maximizes LEED Silver energy credits. The facility will house the County's new public safety Wireless Integrated Network, which will enable 30 fire and law enforcement agencies to communicate with each other by radio in real time on a single system, regardless of their jurisdictional boundaries.

## 5 Year Summary - Energy Expenses and Net Savings

Fiscal Year	2007/2008 Baseline	2008/2009 (Year 1)	2009/2010 (Year 2)	2010/2011 (Year 3)	2011/2012 (Year 4)	2012/2013 (Year 5)	Five Year Total Net Savings
Cost	\$15,100,000	\$12,400,000	\$13,856,535	\$12,728,263	\$13,579,168	\$15,800,131	
Annual Savings (compared to baseline)		\$2,700,000	\$1,243,465	\$2,371,737	\$1,520,832	(\$700,000 above baseline)	
Savings to Date		\$2,700,000	\$3,943,465	\$6,315,202	\$7,836,034	\$7,136,034	<b>\$7,136,034</b>

16



In Process

**Success Indicator: Renewable Energy Use in County Buildings, Parks and Other Facilities**

**Responsible and Supporting Departments:** Facilities Management, Regional Wastewater Reclamation, Environmental Quality

**Baseline:** FY 2008/2009 renewable energy generation capacity is 1,588 kW (1.6 MW)

**Target:** Provide 5% renewable energy for County facilities by 2012; 10% renewable by 2017; and 15% by 2025

**Progress to Date:**

FY 2009/2010 Renewable Energy Capacity: 2.6 MW

FY 2010/2011 Renewable Energy Capacity: 2.278 MW

FY 2011/2012 Renewable Energy Capacity: 3.6 MW (7% of annual electricity load – surpassing the 2012 Target of 5%)

**Score/Progress Report (FY 2012/2013):** In year 4 the County surpassed the 2012 target of providing 5% renewable energy for County operations. The 2017 target calls for the County to provide 10% of its electricity needs with renewables. The County is expanding its renewable energy portfolio and expects to meet the 2017 target.

**Pima County's FY 2012/2013 Renewable Energy Portfolio:**

**Solar:**

4.6 kW Jackson Employment Center 2009

1 MW Roger Road Wastewater Reclamation Facility (WRF) 2010

1 MW Ina Road WRF 2011

225 kW Abrams Public Health Center 2011

5 MW Prairie Fire Solar Plant December 2012

10 kW Pima County Animal Care 2013

Total kWh produced from solar: ~7,834,732 kWh

**Biogas:**

1.3 MW Ina Road Power House (Decommissioned in April of 2013, not included in total generation capacity)

Total kWh produced from biogas: ~1,800,000 kWh

**Total renewable energy generation capacity: ~7.2 MW**

**Total renewable energy generated (Solar + Biogas): ~9,634,732 kWh**

**Percentage of the total electricity consumed (produced by renewables): ~7%**

17



In Process

**Success Indicator: Methane as an Energy Source**

**Responsible and Supporting Departments:** Regional Wastewater Reclamation

**Baseline:** Methane use in FY 2006/2007 (169.84 million cubic feet)

**Target:** Increase the use of methane as an energy source by FY 2010/2011

**Score/Progress Report:** The Regional Wastewater Reclamation Department (RWRD) used 43.627 million cubic feet of digester gas (methane) during FY 2012/2013. This is substantially less than last year's usage due to process changes occurring during the completion of the Regional Optimization Master Plan construction project. Future use is expected to increase significantly once construction is complete.

**Renewable Energy and Conservation Success Story:**

Over the last year, the County completed renovations in several of its buildings that included energy and water efficiency upgrades.

The upgrades included installing new energy-efficient lighting and HVAC systems, and new low-flow water fixtures in the Catalina Community Center, Ajo Recreation Center, Administration West -4th floor, Continental Community Center, and the Eckstrom-Columbus Library. Lighting upgrades were also completed during the renovation of the Picture Rocks Community Center and Dewhirst-Catalina Library.



## EnergyCAP®

### **Renewable Energy and Conservation Success Stories:**

- Tucson Electric Power, Southwest Gas, Trico and Tucson Water have successfully been uploading their utility bills into the energy management software utilized by Pima County since January 2013. This achievement has allowed the County to more accurately track and manage its energy costs and consumption.



- Over the last year, the County made great strides in increasing the efficiency of its Information Technology operations by “virtualizing” most of its servers. The County currently has 40 physical servers providing services within its data center environments, which host approximately 1,015 virtual servers. Virtualizing these servers reduced costs by \$96,525 annually and saves 965,250 kWh of electricity per year.

- The County replaced 12 old inefficient air handling units with energy-efficient units at the Legal Services building. There was no cost to the County as American Recovery and Reinvestment Act grant funds were used to complete this project.



18



Achieved

**SURPASSED!**

**Success Indicator: Amount of Waste Diverted from Landfills**

**Responsible and Supporting Departments:** Facilities Management, Human Resources, Environmental Quality, All Departments

**Baseline:** Tons of landfill waste generated by County operations in FY 2007/2008 (5,593 tons)

**Target:** 25% reduction by FY 2010/2011

**Score/Progress Report:** In FY 2012/2013 the County sent 3,005 tons of waste to landfills, 46% less than 2008 and 31.5% less than FY 2011/2012. This does not include waste generated at construction sites. The discontinuation of baseball spring training has played a significant role in the observed reduction in landfilled waste generated at County facilities.

19



Not Met,  
But Shows  
Progress

**Success Indicator: Green Events at County Facilities**

**Responsible and Supporting Departments:** Economic Development and Tourism, Information Technology

**Target:** 100% of special events to implement an Integrated Solid Waste Management Plan beginning in FY 2009/2010.

**Note:** This target is not achievable as written, as it requires the County to amend the contracts with its leased properties to require the implementation of an Integrated Solid Waste Management Plan (ISWMP) and to adhere to the County's Green Guidelines for events.

**Score/Progress Report:** The County's Waste Reduction Sustainability Team worked with County outreach planners, local groups and agencies to implement community-wide waste reduction and recycling implementation plans.

## Green Purchasing and Waste Reduction

### Success Stories:

- Departments are evolving from a paper-dominated workflow to a paperless one. New technology and processes have been developed to ensure compliance and resource management.
- The Pima County Print Shop saved resources by creating free notepads for use at County worksites from used, recyclable paper. Reusing the paper prior to recycling helps conserve natural resources and reduce our purchases. The Print Shop continues to explore ways to practice sound resource management knowing that paper is a significant portion of our generated waste.
- Collaborating with the Pima County Print Shop allowed Human Resources (HR) to save resources including time and money. The Print Shop utilized automated Variable Data Printing (VDP) to simultaneously print addresses and letter inserts. By utilizing VDP technology, the Print Shop allowed HR to avoid printing and placing 7,710 address labels on envelopes and using the resources required to stuff and seal the envelopes while saving a significant amount of money.





### Waste Reduction Success Stories:

TerraCycle™ pen Brigade Program — In December 2011 the Board of Supervisors approved the County’s participation in the TerraCycle™ pen Brigade Program. TerraCycle™ is a company that creates national recycling systems for previously non-recyclable or hard-to-recycle waste, and turns the waste into a variety of products and materials that are sold at major retailers. As part of the program, employees and the public can collect their used pens, markers, highlighters, pencils and crayons and divert them to TerraCycle™, where they are remanufactured into new products. In exchange TerraCycle™ donates \$.02/pen to Friends of the Pima County Public Library.

The public can participate in the waste diversion efforts at all libraries. Friends of the Library utilize donations to support literacy events, programs and classes. Many of the purchases via the Staples product line are for items made from the TerraCycle™ remanufactured materials. Pima County does not incur any cost for this program.

First six months (1/2012-6/2012): 181 pounds collected for diversion, \$240 donated to Friends of the Library

FY 2012/2013: 290 pounds collected for diversion, \$287 donated to Friends of the Library



- The Waste Reduction Sustainability Team of employees met with the Tucson Meet Yourself staff and University of Arizona Compost Cats to develop and implement a plan to capture landfill waste, recycling and composting during the 2013 Tucson Meet Yourself Festival. Over 100,000 attendees were expected and the EPA reports that an average of 2.44 pounds of waste is generated per person per day. Signage was developed to assist attendees in ways to sort the materials into bins that were color-coded as brown, blue, and green respectively, to match the corresponding signage.

Tucson Meet Yourself and the Compost Cats provided trained student volunteers to be present at each Green Station to help educate the festival attendees with a brief explanation of the type of waste and which bin to use for waste diversion or landfilling.

During the research and development of the program for the Green Stations, the Waste Reduction Sustainability Team concurrently helped the Tucson Meet Yourself staff develop a sustainability plan for the event that can be used as a template for future community events in the County.



A major component of the plan and the efforts of waste reduction at the festival was the ban of polystyrene materials during the festival. With the recommendations of the team and Tucson Meet Yourself staff, the Tucson Meet Yourself Board voted to ban the use of polystyrene materials at the Festival and encouraged vendors to use recyclable and compostable alternatives.

- Facilities Management improved recycling opportunities for the employees and the public by supplying and maintaining collection containers in the Public Works Parking Garage.
- Human Resources revamped the employee training materials to eliminate printing and waste, and encourage online filing and record keeping. All manuals are reusable and materials are sent electronically after the trainings.

20



**Success Indicator: New Buildings Maximize LEED Silver Water-Efficiency Credits**

**Responsible and Supporting Departments:** Facilities Management, Regional Wastewater Reclamation

**Baseline:** Projects designed after September 2008

**Target:** All new buildings will obtain at least 60% of water-efficiency credits available

**Score/Progress Report:** The Pima Emergency Communications and Operations Center on 22nd Street was completed in FY 2012/2013. It obtained 60% of the water efficiency credits to qualify for LEED Silver designation. The Center is part of Pima County's Wireless Integrated Network that will provide a regional communications center to operate during public safety emergencies.

21a



**Success Indicator: Initiation of an Employee Education Series that Focuses on Lessons Learned from Local Case Studies of Landscape Projects and Techniques**

**Responsible and Supporting Departments:** Regional Flood Control District, Facilities Management, Regional Wastewater Reclamation, Stadium District, Natural Resources, Parks and Recreation, Transportation

**Baseline:** Twelve Natural Resources, Parks and Recreation employees completed the Pima County Cooperative Extension's "Smartscape" training on water-efficient landscape practices

**Target:** Increase the number of employees participating in education on water-efficient landscape and water-conservation practices

**Score/Progress Report:** Thirty-six Natural Resources, Parks and Recreation employees attended irrigation management training for turf in FY 2012/2013. This represents a 47% increase compared to FY 2011/2012. Additionally, staff members in the Regional Flood Control District and the Department of Transportation attended a number of trainings and other educational opportunities related to water conservation throughout the year. These trainings covered a range of topics including water harvesting, water conservation, and xeriscaping.

**Water Conservation and Management Success Stories:**

- Instream Flow applications were filed with Arizona Department of Water Resources for Buehman Canyon and Sabino Creek. The applications are part of the process to secure surface water rights for these two important riparian areas in segments owned and managed by Pima County.
- A task force to identify projects for use of the Conservation Effluent Pool water was established in FY 2012/13. Potential projects may include riparian projects owned and managed by Pima County or the Pima County Regional Flood Control District.



21b



Not Met

**Success Indicator: Development of Countywide Guidelines for Low Water-Use and Non-Potable Irrigation in FY 2012/2013**

**Responsible and Supporting Departments:** Regional Flood Control District, Facilities Management, Regional Wastewater Reclamation, Stadium District, Natural Resources Parks and Recreation, Transportation

**Baseline:** Continued monitoring and implementation of guidelines and standards

**Target:** Develop low water-use and non-potable water-use guidelines in FY 2012/2013.

**Score/Progress Report:** Countywide guidelines for low water-use and non-potable irrigation were not developed during FY 2012/2013. The following guidelines are followed for County operations:

**NRPR Uses:**

Efficient irrigation practices for turf and landscaping, including the landscape conservation practices required by the Arizona Department of Water Resources and its xeriscape guide, Landscaping with Style in the Arizona Desert

Landscape Water Management guidelines from the U of A Cooperative Extension Smartscape Program

Trails System Guidelines for Native Species: Reconciliation of Habitat Needs and Trail Design

**DOT Uses:**

Environmentally Sensitive Roadway (ESR) Guidelines, which includes guidelines for revegetation and restoration, based on a site's existing native plant population.

**RFCD Uses:**

Recent detention/retention manual and water harvesting manual developed by RFCD for any CIP projects including Arroyo Chico, Mission View and Paseo de Las Iglesias. Regulated Riparian Habitat Mitigation Guidelines, which include a native plant list and water harvesting techniques.

All County departments that take delivery of reclaimed water from Tucson Water must comply with Tucson Water's Reclaimed Water User Agreements

22



Not Met,  
But Shows  
Progress

**Success Indicator: Water Consumed by Existing County Buildings, Ornamental Landscaping and Roadway Landscaping**

**Responsible and Supporting Departments:** Regional Flood Control District, Facilities Management, Regional Wastewater Reclamation, Stadium District, Natural Resources, Parks and Recreation, Transportation

**Baseline:** Yet to be established

**Target:** Reduce baseline water use by at least 5% by 2012; 10% by 2017; and 15% by 2025

**Score/Progress Report:** The County is actively working to import data into its energy management software to establish a baseline for electricity, natural gas, and water consumption. It hopes to have obtained an accurate baseline by June 2014.

23



Achieved



**Success Indicator: Number of County Parks and Number of Miles of the Trail System Served by Reclaimed Water**

**Responsible and Supporting Departments:** Regional Flood Control District, Facilities Management, Regional Wastewater Reclamation, Stadium District, Natural Resources, Parks and Recreation

**Baseline:** 10 parks served by reclaimed water in FY 2006-07 (285 acre-feet of reclaimed water)

33.94 miles of trails were maintained by NRPR in 2008

30.20 miles were irrigated in 2008

20.88 miles were irrigated with reclaimed water in 2008

**Target:** 20 parks served by 2018

**Score/Progress Report:** Pima County surpassed the 2018 target and has 22 park sites served by reclaimed water.

53.16 miles of Trail System Parks maintained by NRPR in FY 2012/2013

39.23 miles were irrigated in FY 2012/2013

25.13 miles irrigated with reclaimed water in FY 2012/2013

24



In Process

**Modified Success Indicator: To Improve Irrigation Efficiency at Parks and Recreation Facilities**

**Responsible and Supporting Departments:** Regional Flood Control District, Facilities Management, Regional Wastewater Reclamation, Stadium District, Natural Resources, Parks and Recreation

**Baseline:** 733 acre-feet of reclaimed water used in 2006. Note: Baseline was adjusted to include the 39 urban parks operated by the County.

**Target:** No target has been established due to variable weather and climate conditions.

**Score/Progress Report:** In spite of ongoing drought, the total quantity of water used for irrigation purposes at County facilities decreased by 11% (compared to 2011/2012) while the same quality of landscaping was maintained. In total, 1,014 acre-feet of reclaimed water was delivered to County facilities through the City of Tucson reclaimed system in 2012.

25



In Process

**Success Indicator: Acres of Natural Habitat Established or Maintained by County Renewable Water Sources**

**Responsible and Supporting Departments:** Regional Flood Control District, Facilities Management, Regional Wastewater Reclamation, Stadium District, Natural Resources Parks and Recreation, Office of Sustainability and Conservation

**Baseline:** 340 acres of riparian habitat enhanced or restored in FY 2009/2010 with County effluent or reclaimed water

**Target:** 465 acres enhanced or restored by FY 2014/2015; 590 acres by FY 2019/2020; and 715 acres by FY 2024/2025

**Score/Progress Report:** Pima County added 21.35 acres of habitat at the newly constructed Arroyo Chico project. Pima County has restored 368 acres or 0.58 square miles of habitat using reclaimed water on multi-purpose projects that include recreation, flood protection, green spaces, and riparian habitat restoration.

**Water Conservation and Management**

**Success Stories:**

• Although Natural Resources, Parks and Recreation and Regional Flood Control District added 4.25 miles to the trail system irrigated with reclaimed water, it purchased 112 acre-feet less in reclaimed water. Irrigation at two sites was reduced as vegetation matured. This resulted in an 11% savings in reclaimed water.

• Pima County invested \$412,475 from 2004 General Obligation Bonds to build the Dunbar Spring Traffic Calming, Water Harvesting and Street Beautification Project.

This project was completed in December 2012 and utilizes stormwater to irrigate native trees and bushes throughout the neighborhood in traffic circles, curb extensions, and curb openings to provide natural shaded walkways for pedestrians and wildlife habitat. Safety and mobility were increased for residents and visitors and the overall quality of life was enhanced.



26



Achieved

**Success Indicator: Acres of Conservation Lands System Conserved**

**Responsible and Supporting Departments:** Administration, Office of Sustainability and Conservation, Finance, Regional Flood Control District, Natural Resources, Parks and Recreation

**Target:** Acres conserved greater than sites impacted

**Score/Progress Report:** The County acquired 2,354 acres within the Conservation Lands System (CLS) to be managed for conservation. County public improvement projects impacted 28 acres of land elsewhere within the CLS.

27



Achieved

**Success Indicator: Number of Cultural Resources Sites Conserved**

**Responsible and Supporting Departments:** Administration, Office of Sustainability and Conservation, Finance, Regional Flood Control District, Natural Resources, Parks and Recreation

**Target:** Acres conserved greater than sites impacted

**Score/Progress Report:** The County acquired 52 acres of archaeologically important lands with no impacts by County public improvement projects.

28



Achieved

**Success Indicator: Acreage of Designated Riparian Habitat Conserved**

**Responsible and Supporting Departments:** Administration, Office of Sustainability and Conservation, Finance, Regional Flood Control District, Natural Resources, Parks and Recreation

**Target:** Acres conserved greater than sites impacted

**Score/Progress Report:** The County acquired 392 acres of designated riparian habitat to be managed for conservation. County public improvement projects impacted 28 acres of designated riparian habitat elsewhere.

29



Achieved

**Success Indicator: Education of County Employees**

**Responsible and Supporting Departments:** Office of Sustainability and Conservation, Regional Flood Control District

**Target:** Provide annual training to employees on environmental education

**Score/Progress Report:** A meeting was held to educate the County's Capital Improvement Program (CIP) Leadership Council about compliance with the Endangered Species Act as Pima County transitions from project-level compliance to the more regional and coordinated compliance under the County's Multi-species Conservation Plan (MSCP). More specifically, a tracking system is being developed that will improve the ability of the County to estimate the scale and location of public improvement projects' impacts, which will be used to estimate the County's obligations to provide mitigation land under the Endangered Species Act from the existing "bank" of lands already acquired by the County for conservation. The meeting resulted in valuable input regarding the proposed new process.



**Land Conservation and Management Success Stories:**

- On December 20, 2012, Pima County was the successful bidder at the Arizona State Land Department's auction for acquisition of 1,416 acres of State Trust land for conservation for \$3.78 million. This expanded the County's Tortolita Mountain Park to 5,600 acres. Funding sources included bond funds approved by voters in 2004 and a 50% matching grant awarded by Arizona State Parks. In addition to providing recreation opportunities, the acquisition conserved 1,416 acres within the Conservation Lands System, 66 acres of designated riparian habitat, and 11 acres of archaeologically important lands. This single acquisition more than offset the impacts by County public improvement projects that occurred in the same fiscal year.
- On June 1, 2012, Arizona Department of Water Resources (ADWR) advised Pima County Flood Control of an instream flow application that the District inherited when it acquired property in Sabino Canyon in 2008 in order to reduce the potential risks to life and property. The District was unaware of the application until the ADWR letter. In response to a state-imposed deadline to produce and analyze data, the County provided an Instream Flow Assessment to substantiate the recreational and wildlife uses requested in the original application. Pima County Real Property filed assignment papers and provided a copy of the deed. The instream flow water right maximizes the use of water for the natural environment.

30



In Process

### Success Indicator: Reduction in the Carbon Footprint of County Government

**Responsible and Supporting Departments:** Facilities Management, Environmental Quality, Office of Sustainability and Conservation

**Baseline:** County government emissions = 142,591 metric tons of carbon dioxide equivalent (CO<sub>2</sub>e)

**Target:** In 2020, generate no more CO<sub>2</sub>e emissions than in 2007; by 2040, reduce CO<sub>2</sub>e emissions by 50% below 2007 levels

The County prepared its first greenhouse gas emissions forecast in FY 2009/2010. The forecast projects that through aggressive implementation of the County's sustainability initiatives and achieving its renewable energy, energy efficiency, and water conservation targets by 2020 instead of 2025, the County can mitigate the emissions created by future growth in County Operations and achieve its target of generating no more emissions in 2020 than in 2007.

The next greenhouse gas inventory will be released in 2014 using the 2012 data.

**Score/Progress Report:** According to the revised Pima Association of Governments (PAG) 2012 Regional Greenhouse Gas Inventory, Pima County government emissions equaled 147,734 metric tons of CO<sub>2</sub>e in 2010. This represents an increase of 3.6% compared to the baseline year of 2007.

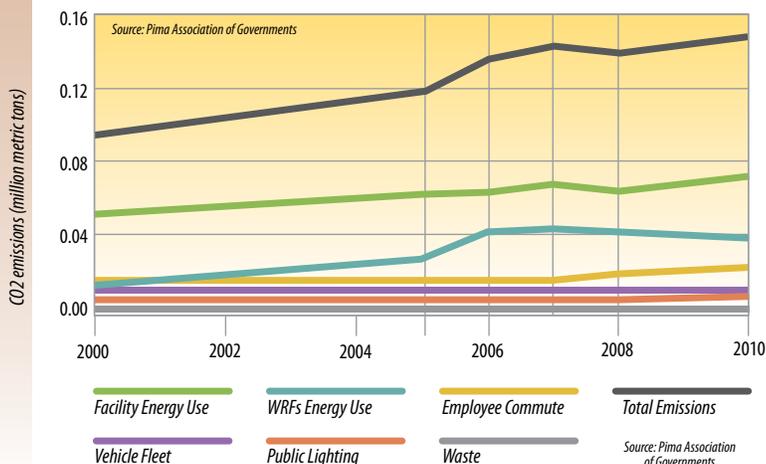
The Pima County government greenhouse gas (GHG) emissions are:

- Facility Energy Use: 72,354 metric tons contributed 49% of GHG emissions
- Wastewater Reclamations Facilities: 38,862 metric tons CO<sub>2</sub>e contributed 26% of GHG emissions
- Employee Commute: 23,295 metric tons CO<sub>2</sub>e contributed 17% of GHG emissions
- Fleet Vehicles: 10,818 metric tons CO<sub>2</sub>e contributed 7% of GHG emissions
- Government Solid Waste disposal: 384 metric tons CO<sub>2</sub>e contributed less than 1% of GHG emissions
- Public Lighting: 2021 metric tons CO<sub>2</sub>e contributed 2% of GHG emissions

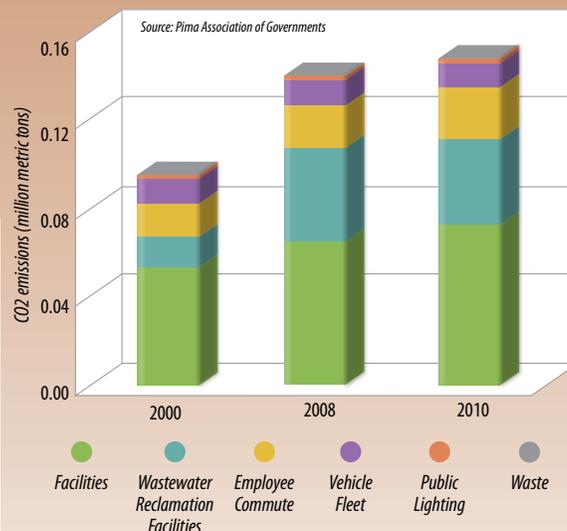
### Carbon Footprint Reduction Success Story:

During FY 2012/2013 Pima County collaborated with Pima Association of Governments to improve reporting methods to monitor our greenhouse gas emissions and strengthen our monitoring and understanding.

County Government GHG Emissions, 2000 to 2010



Comparison of County Government GHG Emissions by Sector, 2000 to 2010

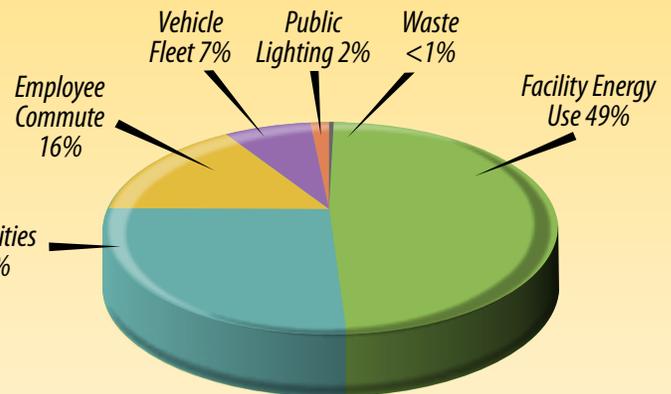


# Carbon Footprint Reduction

Year Five

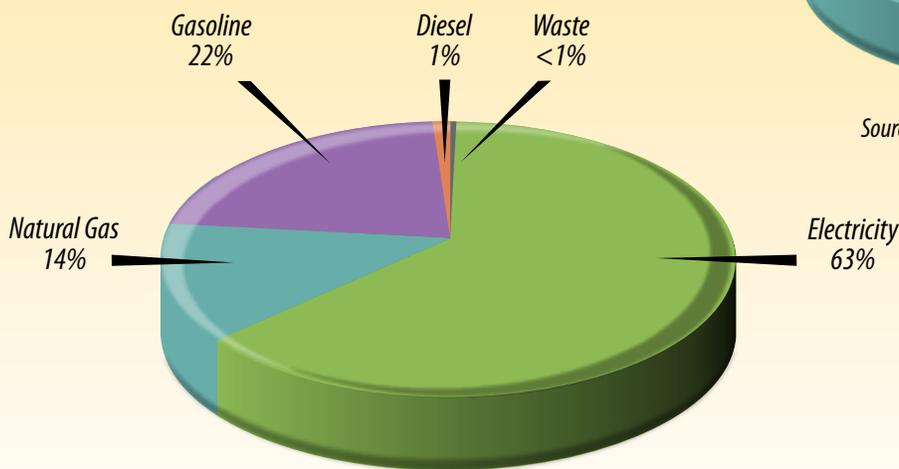
The 2010 Regional Greenhouse Gas Inventory is available at [www.pagnet.org](http://www.pagnet.org)

2010 County Government GHG Emissions by Sector



Source: Pima Association of Governments

2010 County Government GHG Emissions by Source



# Health and Wellness

Year Five

31



In Process

**Success Indicator: Percentage of Employees Who use Active Transportation (Bike, Walk, Public Transit) to Travel to and from Work.**

Responsible and Supporting Departments: Environmental Quality

Baseline: 16% of employees reported using active transportation modes to travel to and from work in FY 2011/2012

Target: Increase employee use of active transportation modes to travel to and from work.

Score/Progress Report: The next employee survey will take place in May 2014. Data for this target will be available after July 2014.

32



Not Met

**Success Indicator: Percentage of Employees Who Participate in Healthy Lifestyle Medical Premium Discount Program.**

Responsible and Supporting Departments: Human Resources

Baseline: 81% of medically insured employees participated in the FY 2011/2012 Healthy Lifestyle Discount.

Target: Increase participation in FY 2012/2013

Score/Progress Report: A total of 77.5% (4,132) of the medically insured employees participated in one or more Healthy Lifestyle Premium Discounts in FY 2012/2013.

33



Achieved



**Success Indicator: Provision of Health and Wellness Education for County Employees**

**Responsible and Supporting Departments:** Human Resources, Communications Office, Environmental Quality, all Departments

**Targets:**

1. Publish 12 monthly articles promoting various programs and opportunities available to employees that encourage healthy lifestyle behaviors and recognize employee achievements through the eScoop newsletter.
2. Publish four articles that promote the use of the Bike Sharing Program and other modes of active transportation to travel for work-related meetings.
3. Provide annual educational opportunities for employees to review all of the benefits and programs that the County offers.

**Score/Progress Report:** 1. The County published more than 12 monthly articles promoting programs and events available to employees that encourage healthy lifestyle behaviors and recognize employees who participated in wellness programs.

2. The County published more than four articles that promote the use of the Bike Sharing Program and other modes of active transportation to travel for work-related meetings.

3. The County held the annual employee benefits fair, which provided educational opportunities for employees to review all of the benefits and programs that the County offers.

The employee website, posters, and email newsletters were enhanced to showcase the many opportunities and programs available.

34



In Process

**Success Indicator: Implementation of Annual Health and Wellness Survey for Employees**

**Responsible and Supporting Departments:** Human Resources, Health, Office of Sustainability and Conservation, Risk Management

**Baseline:** 69% (3,693) of employees participating in the County's health insurance plan completed the online health assessment for FY 2011/2012.

**Target:** Increase response rates of County employees during Phase 2 of the Health and Wellness Chapter.

**Score/Progress Report:** In order to qualify for one of the four Healthy Lifestyle Premium Discounts offered for FY 2012/2013 employees were asked to complete an online health assessment provided by the County's insurance provider. Sixty-nine percent (3,677) of employees participating in the County's health insurance plan completed the health assessment.

**Health and Wellness Success Stories:**

- Wellness incentives or points were made available for employees that participated or volunteered at Cyclovia Tucson. Pima County leads by example with community involvement to showcase active lifestyles, healthy eating, and neighborhood enrichment that improve health and wellness.
- Pima County Employee Wellness is continuously adding new programs to improve health. Employees were encouraged to get more active, reduce stress or get help with managing a chronic condition, and earn points to be used toward potential future Healthy Lifestyle Premium Discounts. The preventive health actions provided and encouraged include health assessments, preventive health screenings, tobacco-free living, and healthy lifestyle actions.



35



In Process

**Success Indicator:** *Percentage of Items Purchased in Applicable Healthy Vending Machines that are Designated as “Green” (Healthiest Option) or “Yellow” (Healthier Options). Items Designated “red” are the Least Healthy Option.*

Responsible and Supporting Departments: Health, Facilities Management

Baseline: In FY 2011/2012, 75% of all sales from “Healthy Vending Machines” were items designated “green” or “yellow”

Target: Target under development.

Score/Progress Report: Data concerning item sales could not be obtained as planned. This indicator is being reassessed.

36



Achieved



**Success Indicator:** *Participation in Preventative Lifestyle and Chronic Disease Management Programs.*

Responsible and Supporting Departments: Human Resources

Target: Increase employee participation.

Score/Progress Report: The Pima County Employee Wellness Program offers a variety of programs throughout the year depending on employee interests and needs as well as available resources. Employees participated 47,483 times in one or more wellness programs, events, and activities, an increase of 64% from the baseline year of FY 2011/2012.

37



In Process

**Success Indicator:** *Health Status Profile of Pima County Employees*

Responsible and Supporting Departments: Human Resources, Health

Baseline: Establish a baseline profile using data from all available resources.

Target: Improve employee health outcomes through targeted interventions during Phase 2 of the Health and Wellness Chapter.

Score/Progress Report: Data will be available in FY 2013/2014 and will be monitored and assessed for program improvements and modifications to address and improve health status of employees.



### Health and Wellness Success Story:

In FY 2012/2013, the Human Resources Department offered employees methods to improve understanding and opportunities to increase participation by updating the electronic media and tracking the Healthy Lifestyle Discounts & Activities.



## Glossary of terms for Year Five Report Card

**Acre-foot (AF):** A unit of volume, commonly used to measure quantities of water used or stored, equivalent to the volume of water required to cover 1 acre to a depth of 1 foot and equivalent to 43,560 cubic feet, 325,851 gallons, or 1,233 cubic meters.

**Active transportation:** Self-propelled, human-powered mode of transportation such as walking or bicycling. Riding the bus is often considered active transportation because of the need to walk or bike to and from bus stations.

**Biogas:** Biogas is a mixture of methane and other gases produced from the decomposition of organic materials. It is produced naturally in landfills, and from the processing of animal waste, sewage, crop waste, and cellulosic and non-cellulosic crops.

**Carbon dioxide equivalent:** A metric used to compare the emissions from various greenhouse gases based upon their global warming potential.

**Carbon footprint:** The total amount of greenhouse gases that are emitted into the atmosphere each year by a person, family, building, organization, or company.

**Conservation Lands System (CLS):** The Conservation Lands Systems (CLS) Regional Plan Policy was adopted as part of the Environmental Element of the Pima County Comprehensive Plan Update in December 2001 and was updated June 21, 2005. The CLS categorizes and identifies locations of priority biological resources within Pima County and provides policy guidelines for the conservation of these resources. These guidelines are applied to certain types of land use changes requested of the Board of Supervisors.

**Effluent:** Wastewater, treated or untreated, that flows out of a treatment plant, sewer, or industrial outfall. Generally refers to wastes discharged into surface waters.

**Energy Star:** An international standard for energy-efficient consumer products. Devices carrying the Energy Star service mark generally use 20-30% less energy than required by federal standards.

**Greenhouse Gas (GHG):** Any gas that absorbs infrared radiation in the atmosphere. Greenhouse gases include but are not limited to, water vapor, carbon dioxide, methane, nitrous oxide, ozone, chlorofluorocarbons, hydrochlorofluorocarbons, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride.

**Kilowatt (kW):** A unit of power equal to 1,000 watts. A watt measures the rate at which energy is used.

**Kilowatt-hour (kWh):** A unit of work, energy or electricity, measured as one kilowatt (1,000 watts) of power expended for one hour. One kWh is equivalent to 3,412 BTU.

**LEED:** The acronym for Leadership in Energy and Environmental Design. LEED certification provides independent, third-party verification that a building, home or community was designed and built using strategies aimed at achieving high performance in key areas of human and environmental health.

**Megawatt (MW):** A measurement of power, usually used when talking about electricity. One MW equals 1,000 kilowatts.

**Multi-Species Conservation Plan (MSCP):** A plan to minimize and mitigate, to the maximum extent practicable, the incidental take of multiple species that may occur in the plan area due to specified, lawful activities. The MSCP has been likened to an insurance policy that provides "coverage" against legal liability for incidentally hurting, harming or harassing species protected under the Endangered Species Act (ESA). The MSCP serves as Pima County's habitat conservation plan for purposes of obtaining a Section 10 incidental take permit under the ESA.

**Non-potable water:** Water that is unsafe or unpalatable to drink because it contains pollutants, contaminants, minerals, or infective agents.

**Reclaimed water:** Wastewater (sewage) that is treated to remove solids and certain impurities, and used in sustainable landscaping irrigation or to recharge groundwater aquifers.

**Renewable energy:** Energy resources that rely on fuel sources that restore themselves over short periods of time and do not diminish. Such fuel sources include the sun, wind, moving water, organic plant and waste material (eligible biomass), and the earth's heat (geothermal).

**Riparian habitat:** Areas adjacent to rivers and streams with a differing density, diversity, and productivity of plant and animal species relative to nearby uplands.



**The Loop,** a connected system of shared-use paths, offers the public, and Pima County employees many opportunities for healthy commuting and recreational activities.



**Pima County Board  
of Supervisors**

Ally Miller, District 1  
 Ramón Valadez, District 2  
 Sharon Bronson, Chair, District 3  
 Ray Carroll, District 4  
 Richard Elías, District 5

**County Administrator**  
 Chuck Huckelberry

**Sustainability Topic by Chapter and the Sustainability (S) Team Leads**

<b>Topic Chapter</b>	<b>S-Team Lead</b>	<b>Department</b>
Alternative Fuel Vehicles	Frank Samaniego	Fleet Services
Green Building	Rich Franz-Ünder	Development Services
Green Purchasing	Mandy Armenta	Finance Division
Renewable Energy and Conservation	Betty Stamper	Development Services
Waste Reduction	Catherine Strickland	Economic Development and Tourism
Water Conservation and Management	Kathy Chavez	Regional Wastewater Reclamation
Land Conservation and Management	Greg Saxe	Regional Flood Control District
Carbon Footprint	Karen Wilson	Regional Wastewater Reclamation
Health and Wellness	Jennifer Billa	Human Resources

**Sustainability  
Steering Committee**

John Bernal	Terry Finefrock	Jing Luo	Nanette Slusser
Charles Casey	Nicole Fyffe	Linda Mayro	Betty Stamper
Arlan Colton	Robin Johnson	Eric Nelson	Catherine Strickland
Jonathan Crowe	Yves Khawam	Alex Oden	Karen Wilson
	Ursula Kramer	Honey Pivrotto	
	Marc Lynn	Greg Saxe	

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**Sustainability Success Story:**



*This publication is printed on paper made from 55% recycled fiber content, with 30% post-consumer waste paper, in accordance with Sustainable Action Plan success indicator number 12.*