

City of Corvallis

Sustainability Annual Report

2012



www.corvallisoregon.gov

Sustainability means using natural, financial and human resources in a responsible manner that meets existing needs without compromising the ability of future generations to meet their own needs.

- City Council Policy on Sustainability

City of Corvallis 2012 Annual Sustainability Report

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Corvallis City Council

Overarching Goals and Values

- | | |
|------------------------|--------------------|
| 1. Diversity | 3. Sustainability |
| 2. Citizen Involvement | 4. Cost Efficiency |

Sustainability in the City of Corvallis

The City of Corvallis has a tradition of leadership in sustainability. Strong support in the community for values that closely align with the three themes of sustainability – social equity, resource efficiency, and cost effectiveness – has been evident for decades. Those values are shared by employees of the City, who have been looking for cost- and energy-saving projects since at least the 1990s. In 2003, the City Council elevated the importance of sustainability by including it as one of its four overarching goals and values. In 2004, it became City policy when the Council adopted a Sustainability Policy for City operations. The table on the next page shows many of the milestones on the City’s path as it continually works to become a more sustainable organization.

On the cover:

It’s not beautiful until you look at the electric bill. The new chiller installed atop the Corvallis-Benton County Public Library in May 2012 helped to cut the building’s electricity use by 51%.

Corvallis' Path to Leadership	
2000	Corvallis joins Cities for Climate Protection campaign
2001	City signs up for renewable energy through Pacific Power Blue Sky program
2004	City Council adopts Sustainability Policy for municipal operations
2005	City Council passes resolution urging residents and businesses to purchase renewable energy
	Environmental Protection Agency (EPA) designates Corvallis a "Green Power Community"
	Sustainability Steering Committee formed (City Manager, Department Directors)
2006	Sustainability Supervisor hired to develop comprehensive sustainability program
2007	Development of ISO 14001-based Sustainability Management System begins
	City becomes founding member of Corvallis Sustainability Coalition
	City becomes founding member of International Society of Sustainability Professionals (ISSP)
2008	City-wide Sustainability Core Team established
	Sustainability fund created to allow departments to explore innovative in-house projects
	Energy Trust of Oregon chooses Corvallis for Oregon's first community energy challenge
	Organization develops five overarching organizational sustainability goals
	City partners with Corvallis Sustainability Coalition on Community Sustainability Action Plan
	Corvallis joins ICLEI — Local Governments for Sustainability
	City earns Julian Award for Sustainability from Oregon Chapter of American Public Works Association
City earns League of Oregon Cities Award of Excellence for sustainability planning	
2009	City Council sub-committee develops <i>Community Energy Strategy</i>
	Staff complete City's first greenhouse gas inventory for municipal operations
	City uses its \$511,600 federal Energy Efficiency and Conservation Block Grant (EECBG) to fund community programs and infrastructure
	City awarded \$78,750 from Pacific Power's Blue Sky program for Fire Station #4 solar project
	Sustainability Program Specialist position created
2010	Council adopts Community Sustainability Policy
	Council passes Sustainability Initiatives Fees for transit, urban forests, and sidewalk maintenance
	EPA chooses Corvallis for its first Green Power Community of the Year award
	EPA awards Corvallis a Climate Showcase Communities grant for \$491,762
2011	City awarded \$144,000 from Pacific Power's Blue Sky program for Fire Station #1 solar project
2012	City awarded Gold certification (highest level) from State Electronics Challenge for the organization's computer purchasing, use and disposal practices
	Council passes Single-Use Plastic Carryout Bag Ordinance

The Sustainability Program in 2012

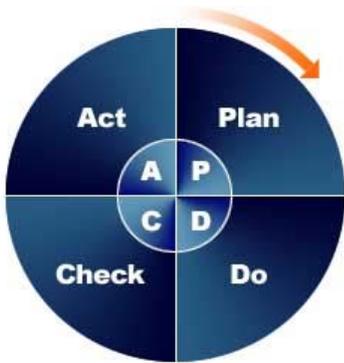
The list above describes some of the countless benefits gained from our sustainability mindset. Organizations across the globe have also realized the benefits and as a result, sustainability has gained wide acceptance worldwide. Despite the many benefits, sustainability programs face challenges. The City of Corvallis, like many government organizations at the federal, state or local level, has faced significant budget cuts in recent years.

In 2012, those cuts hit the City's Sustainability Program, which lost nearly 40% of its dedicated personnel resources. Due to reductions in the 2012/13 fiscal year budget, beginning June 2012

the Sustainability Supervisor position was eliminated. Also lost was the \$15,000 Sustainable Purchasing Project (SP2) fund, used by departments to explore innovative in-house projects. The Sustainability Program Specialist position, formerly 25 hours per week, was increased to a full-time position in an effort to offset other reductions.

As a result of these changes, the Sustainability Program's priorities needed to be re-examined to align with the resources available. Staff reviewed City policies, the Sustainability Management System (SMS) and consulted with internal and external resources to determine the vital programs and projects to continue. The top three work efforts that were identified are:

1. Administer the three-year Climate Showcase Communities grant from the Environmental Protection Agency (EPA).
2. Implement and provide education and enforcement for the Single-Use Plastic Bag Ordinance.
3. Maintain two key areas of the SMS:
 - Measurement and tracking of our sustainability goals
 - Sustainability communications and reporting within the organization, especially across department lines, and to the community



A Sustainability Management System or SMS is a set of processes and practices that enables an organization to integrate its sustainability efforts with existing planning processes and business goals.

The City of Corvallis SMS is built on the ISO 14001 International Standard, which follows the Plan, Do, Check, Act model to foster continuous improvement of the system.

2012 Program Accomplishments

The Sustainability Program is responsible for leading the organization through a systematic approach to enhancing the sustainability of operations. As of mid-2012, the Program consisted of one full-time Sustainability Program Specialist and a small percentage of the Franchise Utility Specialist position. The Program Specialist is responsible for developing and implementing a comprehensive City-wide program, internal and external outreach, grant development, and sustainability metrics. The Franchise Utility Specialist tracks the City's electricity and natural gas consumption and solid waste, promotes conservation practices internally, and documents cost savings. The interdisciplinary nature of the program is evident by the two City-wide teams consisting of staff and management from all departments that meet regularly.

Key accomplishments in 2012

Administering and implementing grants

The City's Energy Efficiency and Conservation Block Grant (EECBG) has provided funding for efficiency projects for the City organization and the community since 2009. As of the end of 2012, the City had completed projects for the total \$511,600 EECBG allocation. For project details, see page 21.

In 2011, the City received nearly half a million dollars in funding for a three-year Environmental Protection Agency Climate Showcase Communities grant. This grant funds four programs through three community partners and are collectively called Energize Corvallis. The goal of Energize Corvallis is to foster measurable reductions in energy use and carbon emissions from homes and businesses in Corvallis.



A lawn sign indicates participation on one of the Energize Corvallis programs.

Two of the Energize Corvallis programs, Communities Take Charge and Energizers, are managed by the Corvallis Environmental Center. Communities Take Charge encourages local residents to try three or more energy saving activities in their home for a month. The Energizers program works through personal networks, such as faith communities, to spread messages about energy efficiency.

The Green Shares program is managed by The Resource Innovation Group (TRIG), a non-profit climate change research organization located in Eugene. Green Shares trains contractors that provide energy and water efficiency services and equipment to give their customers more informed estimates that address not only purchase and installation costs, but also use costs.

The Neighborhood Sustainability Stewards program is managed by OSU Benton County Extension. Stewards attend an eight-week training and then volunteer to provide sustainability education to the community.

The Single-Use Plastic Carryout Bag Ordinance



Considerable Program staff time was necessary to research viable components for the proposed ordinance, conduct public meetings, gather public input, alert and educate affected retail establishments, and raise awareness to prepare the community for this new law.

Staff coordinated the establishment of a community outreach team comprised of supporters of the ordinance. The Bring Your Bag Team then carried out several outreach and education efforts, including reusable bag giveaways, classes to make reusable bags and a reusable bag and logo design contest.

Green Cleaning Policy

The Sustainability Program led the adoption of a new administrative policy on green cleaning that strives to use cleaning products that meet standards for air quality, toxicity, biodegradability and effectiveness.

Tracking our Sustainability Goals

Regularly measuring and monitoring our use of energy, fuel and water, and our generation of waste leads to better management of our resources and often saves money. Sustainability Program staff track our resource use as well as defined measures that help monitor progress on our employee and purchasing goals and report the information to the organization and other stakeholders through the Sustainability Dashboard.

The Dashboard can be seen on page 10 of this report and is available on the City's website at <http://www.corvallisoregon.gov/index.aspx?page=1169>.



State Electronics Challenge



The Sustainability Program worked with Management Information System (MIS) staff to submit an application for the highest level of achievement under the State Electronics Challenge, a nationwide program that recognizes organizations for their life-cycle management of computers. The City was honored with a Gold-level award, their highest, for our leading practices in electronics purchasing, efficiency during use, and disposal through reuse or recycling. In its first year in the Challenge, the City saved enough energy to power 49 households, avoided greenhouse gas emissions equivalent to

removing 85 cars from the road, avoided more than 30 pounds of hazardous waste from being created, and avoided the generation of almost 10,000 pounds of trash.

Looking ahead to 2013

Tracking our Sustainability Goals

Sustainability Program staff will continue to track quarterly the usage of energy and water, promote conservation practices, and document cost savings. Staff will also continue to track the generation of solid waste and progress on the Employer of Choice and Sustainable Purchasing goals. Vehicle fuel use and solid waste generation are focus areas for 2013.

Progress Toward Goals	
Employer of Choice	→
Sustainable Facilities	↑
Sustainable Purchasing	↗
Vehicle Carbon Footprint	↗
Zero Solid Waste	↗

Managing internal sustainability teams

Program staff will continue to facilitate the two organization-wide sustainability teams to improve sustainability communications. Innovation and information spread more effectively when communication flows across departmental lines. The Sustainability Steering Committee, composed of Department Directors, and the City-wide Sustainability Core Team, with representatives from all departments, provide a pathway to communicate with all employees.



Energize CORVALLIS

<http://energizecorvallis.org>

Administering and implementing grants

As part of the EPA's Climate Showcase Communities grant, Program staff is committed to conducting a greenhouse gas inventory of the Corvallis community in 2013. This is in addition to the on-going administration and reporting required until spring of 2014 for the four Energize Corvallis programs.

Enforcing the Single-Use Plastic Carryout Bag Ordinance

The plastic bag ordinance effort will continue into 2013 with Ordinance enforcement beginning on January 1 and July 1, depending on business size. Staff is taking a positive approach to implementation of the ordinance by providing businesses with information and resources to educate their employees and customers to help ease the transition for the community. Complaints of non-compliance in a retail establishment will trigger a site visit to educate the store management and staff. The time commitment necessary for this endeavor is expected to diminish over the year.

Challenges

Sustainability at the City of Corvallis faces significant challenges. Staff has prepared a plan to address each challenge. Many years of engagement and education have engrained a mentality among employees that values sustainability and helps maintain momentum. This core set of values can offset some of the challenges from the decrease in personnel and funding. As the City's sustainability efforts mature, it creates another set of challenges. Each challenge needs to be addressed in a unique way.

Reduction in personnel

The decrease in Program personnel can be counteracted somewhat by using internal sustainability teams to extend the Program's reach. It's important to re-evaluate the internal teams' purposes with an eye toward increasing the number of people talking about, thinking about and advocating for sustainability. Members of the Sustainability Steering Committee and City-wide Core Team will be relied upon to communicate with their departments and work groups. More regular, structured sustainability education and engagement efforts will be used to maintain visibility.

Elimination of the sustainability fund

The \$15,000 fund may not seem like a significant loss, but since 2008 this source has provided the extra push needed to shift a project toward sustainability. One way to address this is to use our internal sustainability teams as experts who can provide life-cycle evaluation of project ideas that may financially justify more sustainable materials or methods.

Maturity of sustainability efforts

Sustainability has been a part of the City of Corvallis decision-making process for at least two decades. Over that time, City staff has done as much as feasible to make our facilities efficient. Since the 1990s, City facilities have experienced great technological leaps in lighting, heating and cooling, building envelopes, water efficiency, on-site energy generation, water treatment and many other areas.

Fortunately, City staff have been creative and resourceful at using outside resources to fund efficiency projects in the past. As a result, our energy and water usage have been declining steadily for several years. However, opportunities to improve the efficiency of City facilities are becoming more limited. Funding from outside sources, which have often tipped the financial scale in favor of a project, have been greatly reduced.

The City finds itself in a situation where it is difficult to continue finding energy-saving projects with a big impact and a funding source. The steady declines in our energy and water use over the past several years have started to level off.

Without steady improvements to our infrastructure that help our efficiency, how will we continue to improve? Staff will continue to vigorously pursue opportunities to adopt improved technology. In addition, we will work to improve communication within the organization to share ideas and encourage innovation and efficiency across departments and divisions. And although the impact of contractor work is not measured by our indicators, staff will continue to seek ways to encourage contractors to reduce resources used in the projects they do for the City.

Cost savings

Sustainability continues to have a positive financial impact on the budget and in the community. Through both increased revenues and reduced costs, the Sustainability Program brings money into the community and the organization.

- The EPA's Climate Showcase Community grant for Energize Corvallis brought over \$150,000 to the community and the City organization in 2012. Grant dollars support 4.5 FTEs in the community and a portion of the Sustainability Program Specialist position at the City.
- Examples are common of cost-saving projects or processes that also reduce resource use or toxicity. One successful project was at the Wastewater Reclamation Plant (WWRP). Grant funds (EECBG) were used to cover the cost to upgrade sixty-six inefficient outdoor lights, saving about \$2,400 annually. Many more examples are highlighted throughout in this report.



New lighting at the Wastewater Reclamation Plant will use approximately 30,000 fewer kWh of electricity each year.

Goals, Objectives, and Targets

Long-term sustainability Goals were developed in 2008 as a way to define and measure progress.

Long-term sustainability goals				
Sustainable Facilities	Sustainable Purchasing	Employer of Choice	Vehicle Carbon Footprint	Zero Solid Waste

By their titles, these goals reflect the sustainable endpoints the organization seeks to achieve. In 2010, staff worked to define how to monitor and measure progress relative to these five goals by setting objectives and targets for each.

Objectives are the over-riding considerations the City takes into account to meet long-term goals.

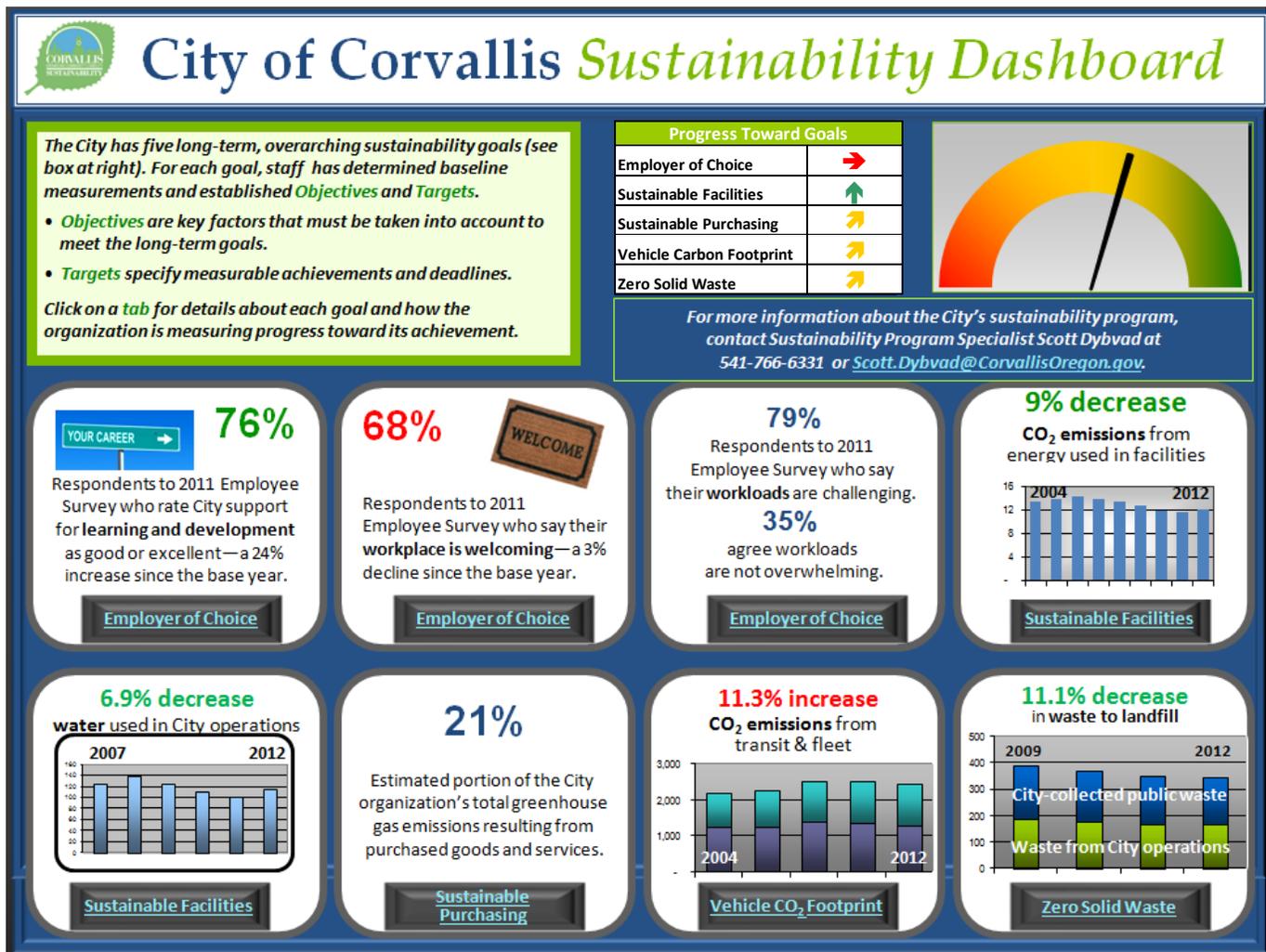
Targets are the performance measures we aim for to ensure we're on the path to achieve our objectives.

For example, the Sustainable Facilities goal has two objectives, each with two future targets:

Goal Sustainable Facilities			
Objective 1 Reduce emissions from energy used in City operations		Objective 2 Reduce water use in City operations	
Target 2015: 5% below 2004 emissions	Target 2020: 15% below 2004 emissions	Target 2015: 15% below 2007 use	Target 2020: 30% below 2007 use

Sustainability Dashboard

The Sustainability Dashboard was designed to provide quick analysis of our sustainability progress. The more carefully we track, measure and monitor our sustainability progress, the better we will manage our resources. The Dashboard provides information about all of our sustainability goals and is updated quarterly. Below is the Dashboard as of the end of 2012.



Sustainable City Report Card

This Report Card shows progress on objectives related to the 2012 Sustainability Work Plan. These objectives are specific actions or activities that advance progress on our sustainability goals. During 2012, the organization made limited progress on these objectives, primarily due to declining resources across all City departments. Of the eleven objectives, six showed progress.

Meets/exceeds goal  Some progress toward goal  No progress toward goal 

2012 Objective	Status	Comment
Goal: Employer of Choice		
Create a calendar in SharePoint for in-house training and continuing education opportunities		Insufficient resources available to pursue this objective.
Complete pilot project in Fire Department to improve performance management practices by making the employee evaluation process more understandable and relevant to positions and job duties.		Insufficient resources available to pursue this objective.
Goal: Sustainable Facilities		
Using research available from LEED-EB investigation, begin developing "operating manuals" for City buildings.		Revised to focus on Library and City Hall energy projects in 2013.
Approve and implement green cleaning policy.		Policy completed and approved. Trainings for personnel in 2013.
Investigate the utility of using Sustainable Sites Initiative performance benchmarks to evaluate City parks, using Sunset Park as the pilot.		Insufficient resources available to pursue this objective.
Complete audits of irrigation systems under City control.		Staffing was insufficient to make progress on this project in 2012, but is a priority in 2013.
Goal: Sustainable Purchasing		
Provide green purchasing training to procurement staff and supervisors.		External sustainability consultants provided customized training for over two dozen Corvallis personnel.
Update municipal greenhouse gas inventory, including embodied emissions from supply chain.		Scheduled for Spring 2013.
Goal: Vehicle Carbon Footprint		
Separate Equipment Management System administrative policy into two policies – one focused on garage operations and another that addresses the sustainability aspects of our vehicle fleet, including replacement schedules and the type of vehicles and fuel purchased.		Drafts of the two administrative policies are under review. Expect to adopt both policies in early 2013.
Goal: Zero Solid Waste		
Complete department-specific waste management plans.		Determined Solid Waste Policy is sufficient to guide all departments.
Develop plan to improve recycling in public areas of City buildings.		Evaluated effectiveness of existing public recycling and composting locations for future expansion.

Progress Toward Organizational Goals

The City organization has adopted five core sustainability goals. As described above, specific measures have been established for each goal that will gauge our progress. Each goal is described in detail in the next few pages. The table below summarizes that progress.

2012 Progress				
Goal	Indicator	Improving	Declining	Inconclusive
Employer of Choice	Employee survey respondents who say their workplace is welcoming to them		3% decrease since base year	
	Employee survey rating of career development opportunity	24% increase since base year 2010		
	Employee survey respondents who say their workload is manageable			Changes to survey wording prevent year to year comparison
Sustainable Facilities	Reduction in greenhouse gas emissions from energy used in City operations	9.1% reduction since base year 2004		
	Reduction in water used in City operations	6.9% reduction since base year 2007		
Sustainable Purchasing	Reduction in impacts from purchases (i.e., emissions, waste, toxicity)			Sufficient metrics not in place
Vehicle Carbon Footprint	Reduction in greenhouse gas emissions from City vehicles (fleet, transit)		11.3% increase since base year 2004	
Zero Solid Waste	Reduction in waste to landfill from City operations	11% reduction since base year 2009		

Employer of Choice

An Employer of Choice is one whose practices, policies, benefits and overall work conditions enable it to successfully attract and retain talent. Employee Development, Diversity, and Workload are the related social sustainability issues the organization is focusing on.

To assess progress, the Sustainability Program tracks responses in the annual employee survey. In 2010, targets were set for 2012 to allow adequate time for progress. However, funding reductions have reduced staff's capacity to conduct the employee survey annually; therefore no employee survey was completed in 2012. The most recent survey results are from 2011.

Enhance Employee Development

Goal progress: The City significantly exceeded its 2012 target of 57% of respondents to the Employee Survey who rate the City's support for lifelong learning and development as good or excellent.

- Baseline 2009/10: 52.3% agree
- 2011 survey results: 76.3% agree
- Increase of 24% above base year (although the survey language change from "good" to "somewhat of a good job" may account for part of the increase)

Increase and Accept Diversity

Goal Progress: The City slightly reversed progress toward its 2012 target of 75% of respondents to the Employee Survey saying their workplace is welcoming for them.

- Baseline: 2009/10: 71.1% agree
- 2011: 68.1% agree
- Decrease of 3% below base year

Manage Workload

Goal Progress: The City appears to be making progress toward its 2012 target of 55% of respondents to Employee Survey saying they "have a workload that is challenging but not overwhelming." However, a direct comparison cannot be made because of changes to the wording of the survey.

- Baseline: 2009/10: 51% agree
- 2011: 79.1% agree that their workload is challenging; 34.6% agree that their workload is not overwhelming

Next steps for Employer of Choice Goal:

- Develop and implement a new employee orientation program.
- Develop and implement a supervisor training program.
- Update the City's sustainability web page and include achievements from all departments.
- Improve employee participation in green office practices through increased education and awareness-raising.

Employer of Choice

Spotlight story: For the holiday gift drive, employees city-wide bought and wrapped gifts for 90 Benton County foster kids, ranging in age from 10 months to 20 years old.



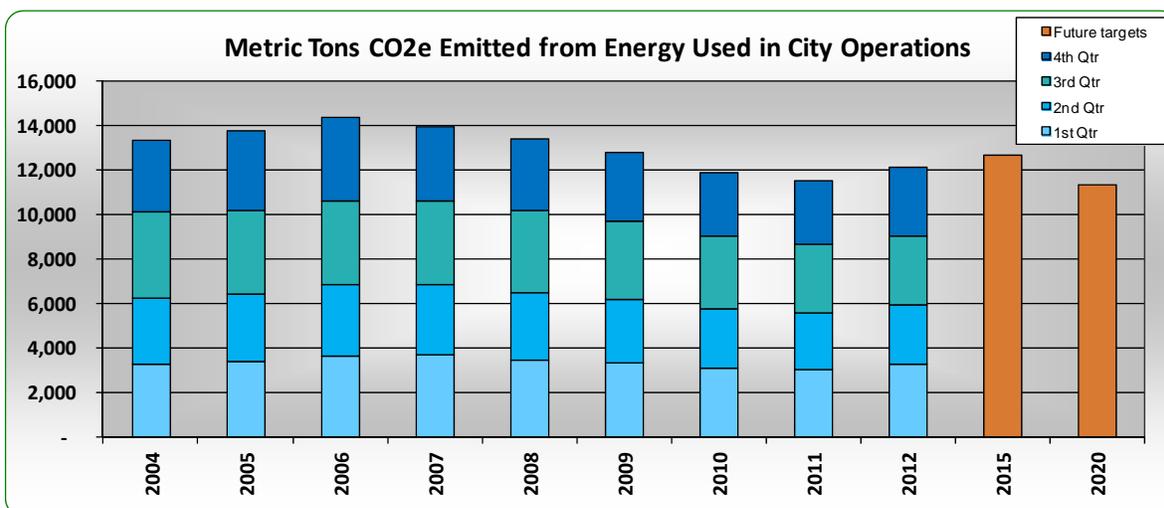
Sustainable Facilities

Sustainable facilities are those built, maintained, and operated in a manner that reduces the consumption of energy, water, and materials, and harm to human health and the environment. They include unoccupied buildings and facilities such as parks and water and wastewater pumping stations.

Energy

Goal Progress: The City is still well on its way to the 2015 target to reduce greenhouse gas emissions from energy used in municipal operations to 5% below the baseline year. However, emissions were up 5.5% from 2011.

- 2004 baseline: 13,307 metric tons carbon dioxide equivalent (MT CO₂e)
- 2012: 11,471 MT CO₂e
- Reduction of 9.1% below base year



In 2012, the organization increased electricity consumption by 742,000 kWh and used about 6,200 more therms of natural gas than in 2011. Over 90% of the increase in electricity use can be attributed to producing drinking water and treating waste/storm water. One billion gallons more waste/storm water was treated due to a very wet winter and severe storm event in January. Osborn Aquatic Center also saw a large increase in electricity used and accounted for most of the increase in natural gas.

These projects focused on reducing the impact of our facilities and equipment:

- The Library chiller replacement was completed in May. Since then, the Library's electricity use has dropped by 51% compared to the same time period last year.
- All green and red traffic signals in the City are LED now as are most of the pedestrian signals and yellow lights in traffic signals.
- The City received 45 LED traffic signal lights in new condition from the Portland Bureau of Transportation because that style is no longer used in Portland. The City paid \$38 for the lights with an estimated value of \$3,500.

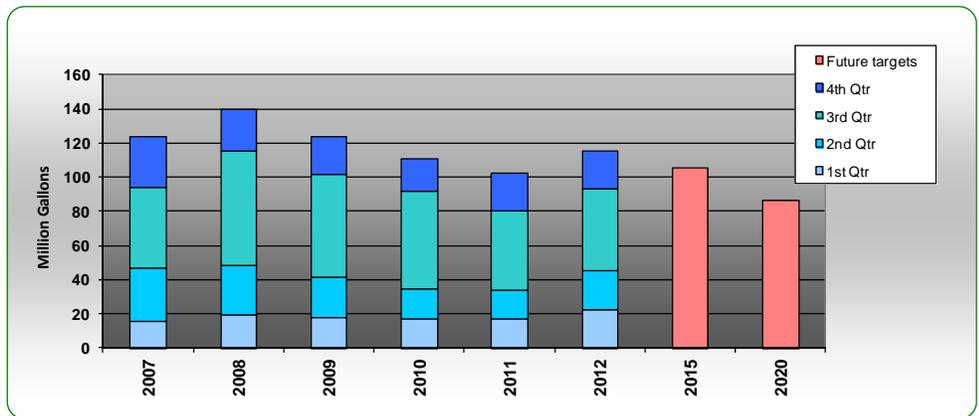
- Motion sensor light switches have been installed in many areas of the Library. Also, the hanging light fixtures in the Belluschi wing were outfitted with energy saving compact fluorescent light bulbs (CFLs). These single bulbs replace a combination of one 300-watt bulb and four 13-watt CFLs in each fixture and are rated to last 10,000 hours, compared to the 2,800 hours for the old bulbs.
- The Library roof replacement used asphalt shingles that will reduce maintenance costs and improve fire protection.
- The lighting in Central Park was upgraded to improve energy-efficiency.
- Community Development is continuing to implement steps to reduce paper use including restructuring staff reports, the expanded use of electronic plan review, and shifting the Request for Proposals (RFP) processes to be more electronically based. Many of these steps also reduce the number of vehicle trips to City Hall.

Water

Goal Progress: After years of decline in water use, City usage ticked upward in 2012 but is still on track to meet the 2015 target to reduce water used in municipal operations to 15% below the baseline year.

- 2007 baseline: 123,824,684 gallons
- 2012: 115,239,876 gallons
- **Reduction of 6.9% below base year**

In 2012, the City's water use increased by about 13 million gallons. Staff identified and addressed many areas of increased usage, including leaks in the Library fountain and an increase in flushing related to water quality. Parks and Recreation installed a water meter at the Aquatic Center that will improve tracking water usage at the facility.



Next steps for Sustainable Facilities Goal:

- Develop an Energy Conservation Upgrade Project List for City buildings starting with the Library and City Hall.
- Determine the efficiency and effectiveness of irrigation systems under City control.

Sustainable Facilities

Spotlight story The City of Corvallis Parks and Recreation Department is using a more sustainable product to control for powdery mildew, rust and black spot in the Rose Garden at Avery Park. Parks and Recreation is using a product from a local company that works to improve soil microbiology, leading to stronger healthier plants that are better able to fight disease and pests with no fertilizers and no pesticides and less water. The result has been stronger, more fragrant plants and more beneficial insect activity in the garden. This replaces a synthetic fungicide and the twice-a-year fertilizer applications, leading to a reduction of about 1,000 pounds of fertilizer per year.



Sustainable Purchasing

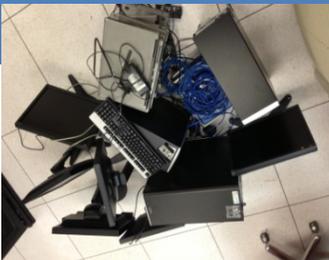
Sustainable purchasing considers the triple bottom line (environmental, economic, and social impact) in purchasing decisions. Useful tools include: life-cycle costing to determine lowest economic cost; specifications that include environmentally preferable characteristics; and third-party certifications (e.g., ENERGY STAR) to identify sustainable products.

Goal Progress: The City does not track all of its purchases in a manner sufficient to determine whether negative impacts (e.g., greenhouse gas emissions, waste, toxicity) are being reduced from one year to the next.

Staff has struggled to find ways to effectively measure progress on the Sustainable Purchasing Goal. The most recent organizational greenhouse gas inventory, completed for calendar year 2008, provides our current best estimate of emissions from purchases. Using purchasing records and the Economic Input-Output Life-Cycle Analysis (EIO-LCA), a public-domain tool developed by Carnegie-Mellon University, it was conservatively estimated that 4,144 MT CO₂e were generated from organizational purchases – an impact second only to electricity.

Sustainable Purchasing

Spotlight story MIS began purchasing computers in bulk in 2012. The process begins with City staff working with MIS staff to determine what to buy, placing the computer order, and scheduling the deployment one computer at a time. The change has resulted in employees spending less time ordering computers, reduced the number of trips by vendors making deliveries, and the computer vendor unboxes and takes back the shipping materials.



Computer equipment awaits disposal through reuse or recycling, depending on age and effectiveness.

City staff plan, to conduct another organizational greenhouse gas inventory for calendar year 2012 for comparison and to identify areas for attention. Some successes in 2012 around purchasing include:

- Consultants presented a Sustainable Purchasing training for supervisors and purchasing staff.
- A green cleaning policy was implemented for cleaning products used on City facilities.
- The Senior Center and Police Department now purchase 100% recycled paper for all copiers.
- The Police Department purchased LED lights for vehicles and weapons to reduce battery use and improve safety.
- Most locations at the City now purchase recycled toner from local Corvallis vendors.
- The Library repurposed shelving from the OSU Bookstore and the Oregon City Public Library. Some of the shelving is already in use at the Corvallis Benton County Library and the rest will be used in the new Monroe library when it opens.

Next steps for Sustainable Purchasing Goal:

- Update the City organization's greenhouse gas inventory, including supply chain emissions.

Vehicle Carbon Footprint

Vehicle carbon footprint is measured in the organization's greenhouse gas inventory. The City aims to decrease its use of fossil fuels by using more energy-efficient, alternative-fuel, and hybrid vehicles and by changing driving behaviors.

Sustainability Program staff track vehicle fuel use monthly through reports generated from use of the City's fueling pumps located at Public Works. Software upgrades now allow tracking fuel use by vehicle, which will provide better data to improve efficiency.

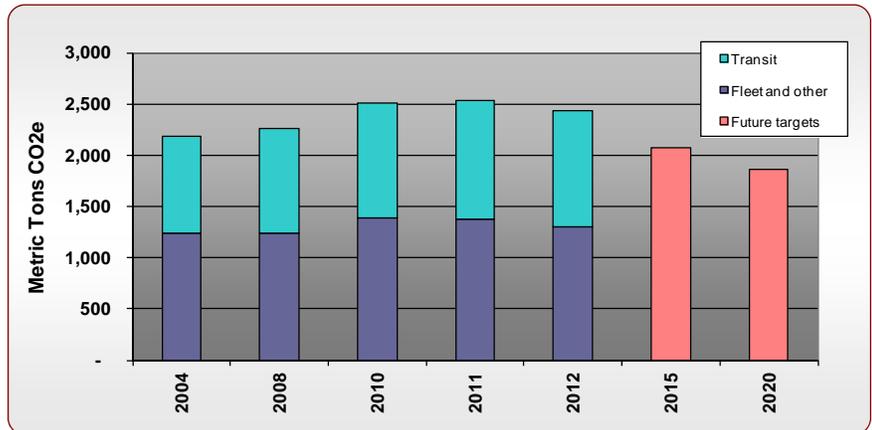
Goal Progress: The City began moving in the right direction to meet its future targets to reduce greenhouse gas emissions from City vehicles (fleet, transit).

- 2004 baseline: 2,187 MT CO₂e (baseline total increased from 1,801 MT CO₂e to account for upstream impacts)
- 2012: 2,434 MT CO₂e
- **Increase of 11.3% above base year**

In 2012, the City organization decreased gasoline, diesel, and biodiesel fuel use by nearly 4% as compared with 2011. Consumption was down from the previous year for both transit (1,582 gallons) and fleet (6,411 gallons). The organization will continue to pursue practices and technologies that help reduce emissions and save money.

Below are examples of positive steps related to fuel savings in 2012:

- The Fire Department implemented a change in their response system that reduces the number of apparatus that respond to fire alarms. This leads to fuel savings, a reduced impact on apparatus, and decreases interruptions to work groups without impacting service delivery.
- Librarians attended two on-line "virtual" conferences. These types of web conferences are becoming more popular and are a sustainable and cost-effective way to offer training for staff.
- Twenty-one new employees participated in "Get There Another Way Week," when employees are encouraged to leave their single occupancy vehicle at home and get to work by taking the bus, walking, bicycling, or car- or van-pooling. In total, City employees commuted 818 miles in ways other than a single-occupancy vehicle, saving 27 gallons of gas and 543 lbs of CO₂e.



Spotlight story: The Fire Department is now using web conferencing software for about a third of their scheduled training. The department is also working on expanding the use of this software for some specialty trainings as it provides the ability to record presentations for later viewing by team members. This tool allows personnel to remain in their station for certain drills or meetings, which reduces fuel consumption and miles put on apparatus.

Next steps for Vehicle Carbon Footprint Goal:

- Separate Equipment Management System administrative policy into two policies – one focused on garage operations and another that addresses the sustainability aspects of our vehicle fleet, including replacement schedules and the types of vehicles and fuel purchased.
- Establish strategies to reduce vehicle fuel use.

Zero Solid Waste

Zero solid waste encourages staff to use resources in a manner that reduces waste to the landfill to zero. It promotes reuse, recycling, and waste prevention from reduced consumption and considers the entire life cycle of a product. Staff conducts waste audits and measures success by the diversion of waste from the landfill, an increase in materials recycled or reused, and financial savings from smaller garbage bins.

Reduce waste to landfill from City operations

Goal Progress: The City is making progress on its target to reduce this waste stream to 25% below the baseline year.

- 2009 baseline: Waste to landfill roughly 388 tons, of which 186 tons (48%) is from City operations
- 2012: Roughly 165 tons of waste from City operations sent to the landfill.
- Reduction of 11% below base year

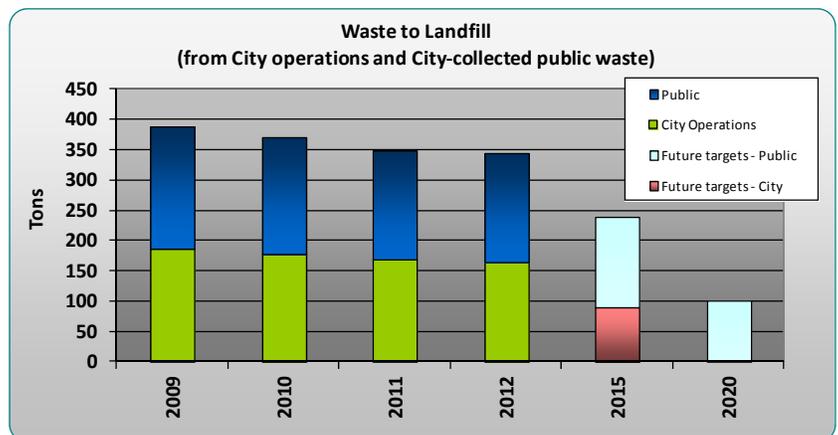
Reduce waste to landfill from public collections

Goal Progress: The City met its target to reduce waste to the landfill from public collections to 25% below the baseline year.

- 2009 baseline: Waste to landfill roughly 388 tons, of which 202 tons (52%) is collected from public locations
- 2012: Roughly 179 tons of waste from public collections sent to the landfill.
- Reduction of 11% below base year

Overall, in 2012 the amount of solid waste sent to the landfill was down 5 tons. Staff will continue to look for opportunities to increase the amount of recyclable material collected, especially from public areas. Several projects have been successful in reducing waste generated, both within the organization and in the community:

- At the Osborn Aquatic Center and the Chintimini Senior Center, staff rolled out paper towel composting to more public areas.
- The Senior Center also expanded their recycling for employees and visitors to include hard plastic, plastic film, and small electronics.
- The City continued to purchase more dumpsters for cost savings. This year the rented dumpster at the Aquatic Center was replaced with a payback period of only 2.5 years.
- City Police and Public Works departments partnered with the Drug Enforcement Agency to offer drug take-back events for the Corvallis community. Over 1,100 pounds of unwanted medications were collected at two events during the year. Removing these products from the waste stream protects our drinking water supply and the aquatic organisms that live in our streams and rivers.



Next steps for Zero Solid Waste Goal:

- Conduct gap analyses of waste reduction opportunities at each facility.
- Improve recycling in public areas of the Library and Osborn Aquatic Center.

Community Capacity Building

As directed by the City Council Organizational Sustainability Policy, this section focuses on progress achieved by the City's internal sustainability program and objectives for the next reporting period. However, City staff efforts have a significant impact in the community as well. Below are a few examples of staff contributing to community sustainability.

- City of Corvallis employees participated in the annual Benton County United Way / Earth Share campaign. In a two-week period, employees donated \$12,213 to local non-profit agencies and \$1,667 to Earth Share.
- The City Manager's Office has been on the front line in the effort to help the City Council achieve one of their Council goals, a sustainable financial budget. The 2012-13 adopted City budget represents the first step in a multi-year process to create a more sustainable financial future.
- The Library added to its website resources public access to the GREENR database, a source for environmental news, commentary and case studies for students and professionals.
- Public Works Transportation Division staff partnered with Corvallis Police Department (CPD) in an event called "Light it up." A CPD Bike Officer, Division staff, and volunteers worked with bicycle owners to put 130 lights on unlit bicycles at a busy intersection near the OSU campus.
- The City of Corvallis High Efficiency Toilet retrofit incentive program distributed 163 rebates during Fiscal Year 2011-12. Over the life of the fixtures, staff estimates that these efficient toilets will save between 26.6-59.0 million gallons of water and \$160,000-\$456,000 in water and sewer charges.
- Public Works staff identified and repaired more than 500 sidewalk defects over the last two years using funds from the Sustainability Initiative Sidewalk Maintenance Fee.
- The Corvallis Transit System expanded service in late September 2012, with more frequent runs on the most heavily used routes. Since buses went fareless in February 2011, ridership has increased by 53% to over 1.1 million rides in 2012.
- Community Development led the process to amend the Land Development Code, including provisions that encourage growing food crops in City limits and focus on encouraging infill development.
- Community Development provided 12 Saving Energy Loan Fund (SELF) loans to improve the energy efficiency of owner-occupied homes for a total of \$109,000.
- Community Development expanded on-line options to include plumbing and solar permits.
- The City partnered with the OSU Survey Research Center to create a locally produced survey, tally the results and provide analysis that will be used by policy makers in achieving a financially sustainable City budget.
- Public Works Transportation and Utilities Divisions partnered to apply to the Environmental Protection Agency (EPA) to fund a "Green Streets" initiative to improve both water quality from street runoff and alternative transportation options.

Efficiency

Staff works diligently to improve efficiency in City operations. The following items are examples that don't readily fit into one of the five sustainability goal areas.

1. The Finance Department implemented a purchasing card program with an emphasis on reducing the cost per transaction for City purchases. In 2012, this action led to 4,603 fewer checks processed and mailed, saving thousands of dollars in labor and material.
2. By the end of 2012, Public Works Utilities staff installed advanced automated water meters on about 2,300 of the 17,000 water meters in the City. These automated meters offer real time data, leak detection and require no vehicle travel to be read. Once installed more broadly across the City, this technology is expected to reduce labor costs.
3. The Finance Department refunded loans in the Water and Wastewater funds for a net present value savings to the community of \$1.6M. This will also reduce loan rates on any future borrowed money.

Conclusion

The City organization serves as a model for local governments throughout the country that are working on sustainability issues. The accomplishments and challenges highlighted in this report underscore the considerable efforts that City staff are making to incorporate sustainable practices into organizational operations. These efforts are reducing energy consumption, saving operational costs, reducing waste, conserving resources, protecting natural features, and strengthening relationships within our own community and with other organizations that value sustainability.

If you have questions or comments about the City's Sustainability Program, please contact the Sustainability Program Specialist at (541) 766-6331 or visit <http://www.corvallisoregon.gov/sustainability>.

Energy Efficiency and Conservation Block Grant (EECBG) Update

By the end of 2012, the City had completed all of its EECBG projects.

Majestic Theatre Lighting Upgrade – The City upgraded incandescent and fluorescent lights to more energy-efficient fixtures. The project was completed in June 2010, saving 33,000 kWh per year.

Revised Project budget = \$14,755; project cost = \$14,755

Energy Efficiency Volunteer Coordinator – Through a subgrant to the Corvallis Environmental Center (CEC), a Volunteer Coordinator was hired in January 2010 to train volunteers to educate residents on energy-reduction techniques and financial incentives. Completed in January 2011, the project trained 82 volunteers, contacted 1,080 residents, and assisted 58 households to complete 183 energy conservation measures.

Project budget = \$50,000; expenditures = \$49,993

Corvallis Weatherization Incentive Program (CWIP) – Through a subgrant to the CEC, the program offered incentives of up to \$500 to households for weatherization projects. As of the project's completion in December 2011, 115 incentives had been disbursed for a total of \$50,083. The estimated annual energy savings from these projects are 23,413 kilowatt hours and 15,627 therms.

Project budget = \$79,600; expenditures = \$79,566

Saving Energy Loan Fund (SELF) – As of the end of 2012, the Housing Division had issued 12 loans, totaling \$109,000 for energy conservation projects. Revised project budget = \$188,702; expenditures = \$145,926

Senior Center Geothermal Heating – This project was cancelled after a design review revealed that there was inadequate budget to complete the project as proposed.

Revised project budget = \$2,078; expenditures = \$2,078

Corvallis Library Chiller Replacement – An obsolete air conditioning chiller was replaced with a more efficient unit. Revised Project budget = \$146,476; expenditures = \$146,476

Fire Station #1 HVAC Commissioning – This project involved the installation of new sensors, control hardware and software, and system tuning to achieve a more comfortable building while using less energy. Project budget = \$27,000; expenditures = \$26,832

Wastewater Plant Lighting Upgrades – Sixty-six outdoor lights at the Wastewater Plant were upgraded because they were inefficient, saving a projected 30,000 kWh annually.

Project budget = \$31,423 expenditures = \$29,956

Street Lighting Upgrades – Forty-six City-owned street light fixtures on Research Way and Technology Loop were upgraded to fixtures using less than half as much energy and a bulb that lasts five times longer. Annually this upgrade will save 20,000 kWh.

Revised Project budget = \$16,200; expenditures = \$16,018