

City of Corvallis

Sustainability Report

2015-2016



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 2015-2016 Sustainability Report

Table of Contents

Highlights of Corvallis' Sustainability Efforts	3
Corvallis Climate Action Plan	3
Organizational Greenhouse Gas Inventory	4
Sustainability Work Plans	5
Progress Toward Organizational Goals	7
Employer of Choice	7
Sustainable Facilities.....	10
Sustainable Purchasing.....	14
Vehicle Carbon Footprint.....	16
Waste Reduction	18
Sustainability in the Community	20
Looking Ahead to 2017	22
Conclusion	22



***Imagine Corvallis 2040
Vision Statement***
Corvallis is a safe, sustainable, resilient, small city... that maintains the community's safety and security, protects its natural environment, addresses a changing climate, and prepares for emergencies with special attention paid to its most vulnerable populations.

On the cover: A view of Marys Peak from the City's new 75 kW solar array located near the airport on a former E.P.A. Superfund Cleanup site.

Highlights of Corvallis' Sustainability Efforts

Corvallis Climate Action Plan

At the beginning of each two-year term, City Councilors set goals to accomplish during that time. For their 2015-2016 term, City Council adopted a Climate Action goal that was defined in two parts: "Over the next two years, take bold action to address climate change by (1) supporting the energy conservation efforts of the Corvallis Georgetown University Energy Prize team, and (2) adopting and beginning to implement a comprehensive, long-term climate action plan that will significantly reduce Corvallis' greenhouse gas emissions and foster Corvallis' resilience to the effects of climate change."

City staff, a project manager, and technical consultants worked with the Mayor-appointed Climate Action Task Force to develop the Climate Action Plan with significant feedback from stakeholders across the community. The Climate Action Plan (CAP) focused on identifying actions that will effectively and quickly reduce greenhouse gas emissions generated by both our community and our City operations. Additionally, actions were also developed that help the community adapt to the effects on the environment from anticipated changes in our local climate.

The CAP has six focus areas for action:

1. Buildings & Energy
2. Land Use & Transportation
3. Consumption & Waste
4. Food & Agriculture
5. Health, Social Services, & Community Well-being
6. Urban Natural Resources

During the eighteen-month process, workshops were held where community members and City employees with expertise in each area worked to identify and prioritize actions to reduce greenhouse gas emissions. Over 60 City employees and community members participated by reviewing a list of possible actions and scoring them to determine feasibility in our community.

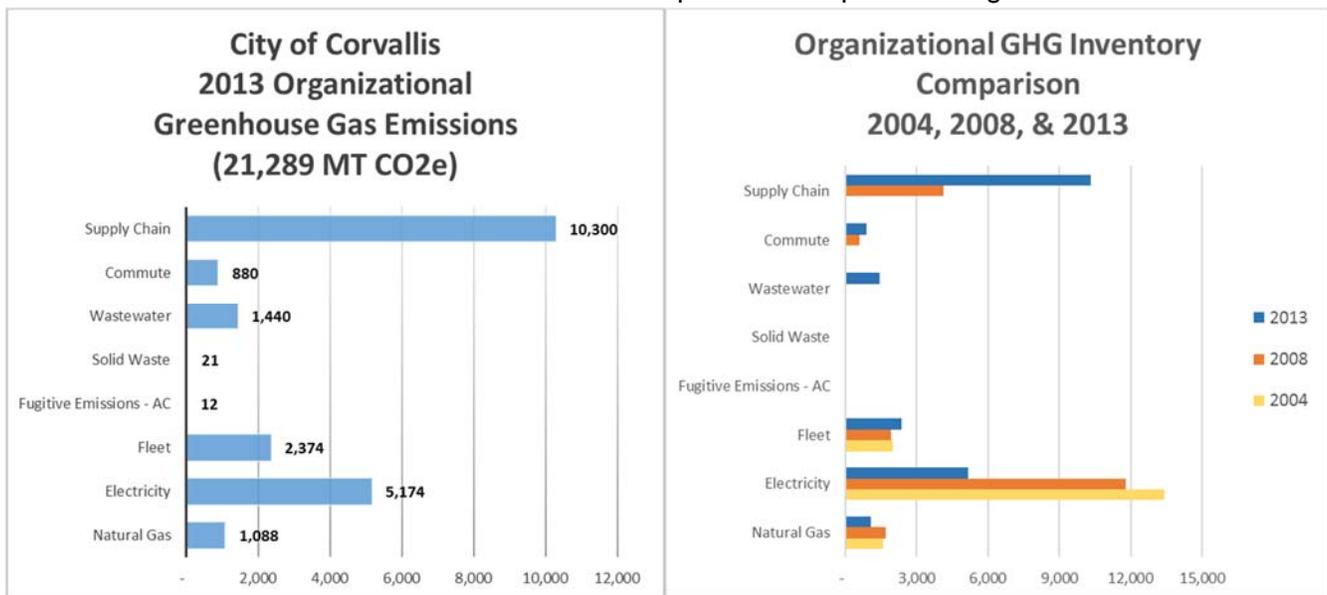
Staff then reached out to a larger section of the community for more input. This group included businesses and organizations that actively participate in one of the focus areas (for example, builders, developers, and residential energy efficiency contractors were encouraged to provide feedback on the Buildings & Energy section). Public forums were held to gather input from as much of the community as possible. All of this feedback was synthesized into the final CAP that was adopted by City Council in December 2016. Recognizing that an implementation plan was needed, Council extended the Task Force for six months to develop that plan. For more on the CAP, visit the City's website at www.corvallisoregon.gov/ClimateAction.

The Georgetown University Energy Prize and the City's contribution to that effort are described later in this report (see page 20).

Organizational Greenhouse Gas Inventory

The organizational greenhouse gas inventory, which calculates emissions from municipal operations, has been updated with data from calendar year 2013 using the Local Government Operation Protocol version 1.1. Previous organizational inventories were conducted for years 2004 and 2008. Methodologies for greenhouse gas inventories are continually being updated and refined to make the process less cumbersome and more accurate. This creates some difficulty in comparing different years because some emission sources are consistent over time (fleet), some can be classified differently (wastewater separated from electricity) and some may not have been included in early iterations (supply chain).

The 2013 inventory allows us to fully quantify and identify the major contributors to our emissions. The two charts below show emissions in 2013 and a comparison with previous organizational inventories.



Overall, emissions measured in the City organizational greenhouse gas inventory have increased each time they have been measured. Most of this increase is due to changes in how the inventory is conducted, either from a change in methodology or an earlier lack of data.

Our organizational sustainability metrics provide a level of detail that helps to pinpoint some of the changes in emissions.

- Emissions from electricity were steady from 2004 to 2008 and then dropped almost 9% by 2013.
- Natural gas emissions increased almost 23% from 2004 to 2008 and then fell nearly 29% by 2013 to 12% below 2004 emissions.
- Emissions from our vehicle fuel use increased 13% in 2013 compared to 2004.

The 2013 inventory includes the most complete data – the 2004 inventory lacked emissions associated with the supply chain, employee commutes, wastewater, and solid waste and the 2008 inventory lacked full data on the supply chain and wastewater emissions. With that in mind, emissions for each year are as follows:

Total Greenhouse Gas Emissions (MT CO₂e) from Municipal Operations	2004	2008	2013
	17,016	20,198	21,289

Sustainability Work Plans

At the beginning of each year, the Sustainability Steering Committee and the City-wide Sustainability Core Team work to develop projects specifically focused on each sustainability goal. These goals, established in 2010, reflect the sustainable endpoints the organization seeks to achieve. Work Plan projects and a description of the progress made in each goal area are listed below.

2015 Sustainability Work Plan Objective

Progress

2015 Sustainability Work Plan Objective	Progress
Goal: Employer of Choice	
Implement strategies to improve employee participation in the Spring Fitness Challenge.	Completed
Update targets for Sustainable Facilities and Vehicle Carbon Footprint that continue to challenge the organization's employees to maintain the organization as a leader in sustainability.	Completed
Goal: Sustainable Facilities	
Investigate power generation options from digester methane gas, such as for Public Works boilers.	Completed as part of compressed natural gas investigation
For all irrigated park areas, assess irrigation versus actual evapotranspiration needs and prioritize areas for attention.	Completed
Evaluate and prioritize facilities with fluorescent lighting for LED replacement.	LED replacements at Library and most high-wattage streetlights. Evaluation and prioritization continue as resources allow.
Goal: Sustainable Purchasing	
Update vehicle replacement policy for fleet vehicles purchased through the Public Works garage.	Completed
Goal: Vehicle Carbon Footprint	
Evaluate the viability of the City transitioning to compressed natural gas (CNG) as a fuel source for transit buses.	Completed
Goal: Waste Reduction	
Explore more efficient methods for Parks waste collection (e.g. equipment, routes).	Not completed due to resource constraints

2016 Sustainability Work Plan Objective

Progress

Goal: Employer of Choice	
Complete Organizational Climate Action Plan with support from all departments.	Completed. Corvallis Climate Action Plan adopted by City Council on 12/12/16.
Number of minority applicants for job openings reflects the community's diversity.	Striving to increase the amount of minority applicants, a diversity advertising campaign began in 2016, including online and print employment announcements in the Equal Opportunity Employment & Education Journal and the National Minority Update. In 2016, 20.6% of applicants identified themselves as minorities. This is a 4.6% increase over 2015.
Goal: Sustainable Facilities	
Evaluate and prioritize water-using devices for higher efficiency replacements.	Four City facilities were audited and issues addressed: <ul style="list-style-type: none"> • City Hall Annex • Otter Beach at Osborn Aquatic Center • Parks Administration building • Library Audits will expand to other facilities in coming years.
Provide information comparing water use over time to facilities (e.g. fire stations, Osborn, Library).	Completed at Library, expanding to Osborn and others.
Utilize the Parks Irrigation Evapotranspiration (ET) tracking tool to monitor ET annually, track trends and identify potential areas of water savings for each park. Priorities include assessing and addressing the increased water usage at the Riverfront fountain, Willamette Park, Chepenefa Springs Park, and Franklin Park.	Ongoing irrigation monitoring using ET tracking. Riverfront fountain repairs and replacement of parts. Franklin Park irrigation turned off due to playground replacement. Repairs to the Willamette Park irrigation system are ongoing.
Goal: Sustainable Purchasing	
Identify pool vehicles from existing City fleet and create a reservation system for City-wide sharing.	Public Works has five vehicles available for reservation. Employees City-wide can reserve these vehicles for City purposes. Over the last year, Police and Human Resources departments were the biggest users. Expanding to the downtown departments in FY 17-18.
Goal: Vehicle Carbon Footprint	
All new passenger vehicles and light-duty trucks purchased by the City are equal to or more fuel-efficient than the vehicles being replaced.	Public Works replaced three vehicles with higher miles per gallon, Fire replaced one, and Police replaced one.

2016 Sustainability Work Plan Objective

Progress

Goal: Waste Reduction	
Assist 2-3 workgroups or departments to identify obsolete equipment or materials for disposal, prioritizing reuse and recycling over landfilling.	Taylor Plant and Tech Services complete.
Continue to explore more efficient methods for Parks waste collection (e.g. equipment, routes).	Options explored, but with current staffing / service levels, no changes expected.

Progress Toward Organizational Goals

In 2010, the Sustainability Steering Committee and Core Team developed five long-term sustainability goals:

- Employer of Choice
- Sustainable Facilities
- Sustainable Purchasing
- Vehicle carbon footprint
- Waste reduction

These were developed through guidance from the City Council's Organizational Sustainability Policy, adopted in 2004, that uses a triple-bottom-line framework to enhance sustainability in all aspects of the organization's activities. City departments, through changes in daily operations, ongoing programs, and long-range planning are able to simultaneously have a significant positive impact on the environment, the economic efficiency of municipal government, and the social character of the workplace. Departments promote actions which are environmentally and socially beneficial, while also being economically intelligent.

The organization continually strives to make tangible improvements in each of these goal areas through the Sustainability Work Plan (outlined on the previous pages) and other projects that develop over time.

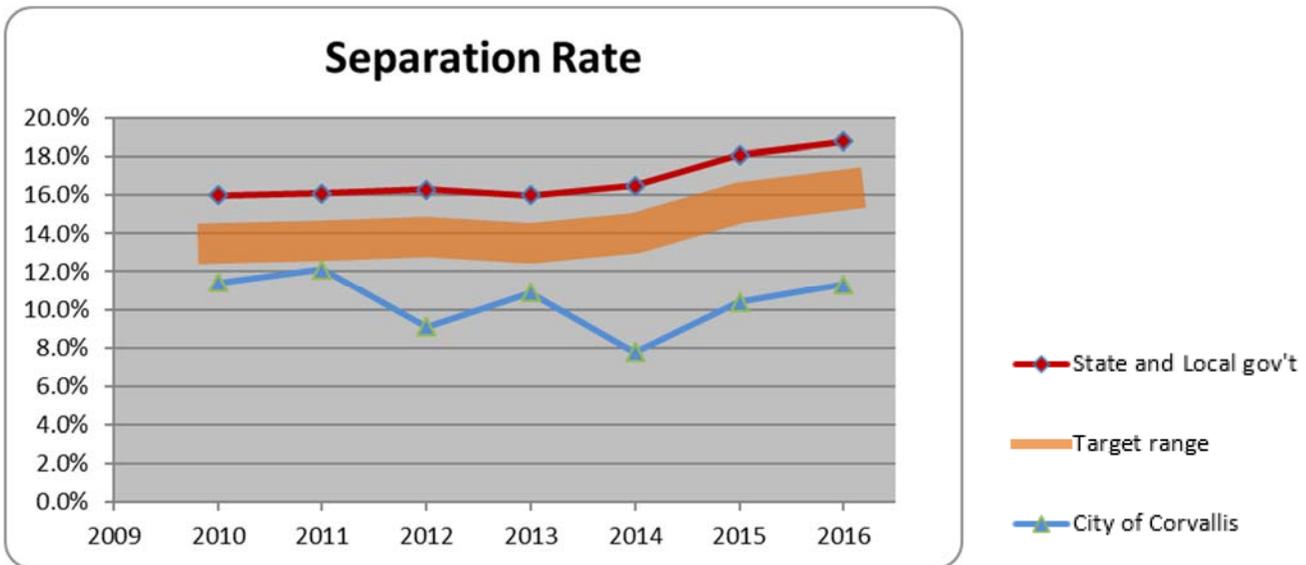
Below is a brief description of each goal area, our performance on measurable objectives and targets, and highlights from related projects completed over the past two years.

Employer of Choice

An Employer of Choice, as we've defined it, is one whose practices, policies, benefits and overall work conditions enable it to successfully attract and retain talent. This social sustainability goal focuses on the issues of turnover, work-related injuries, and employee wellness. To assess progress, City sustainability teams track key indicators and compare those to industry standards.

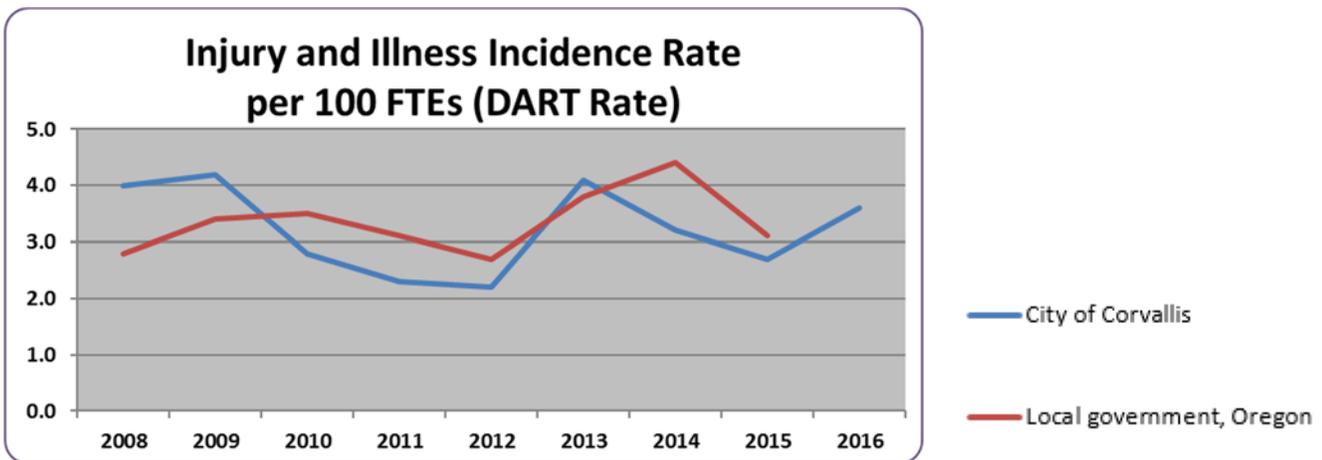
For this goal we measure three distinct areas: Separation Rate, Injury and Illness Incidence Rate, and Spring Fitness Challenge Participation. The organization's performance on these metrics are shown in the following charts.

Separation Rate - Maintain a separation rate of 2-3 percentage points below the annual separation rate for State and Local Government as reported by the Bureau of Labor Statistics.



The Bureau of Labor Statistics of the U.S. Department of Labor compiles comparator data for this metric. The data includes job openings, hires, quits, layoffs, discharges, and other separations. The City's separation rate has consistently been below our comparator (nation-wide state and local governments) as well as below our target range (2-3% below comparator).

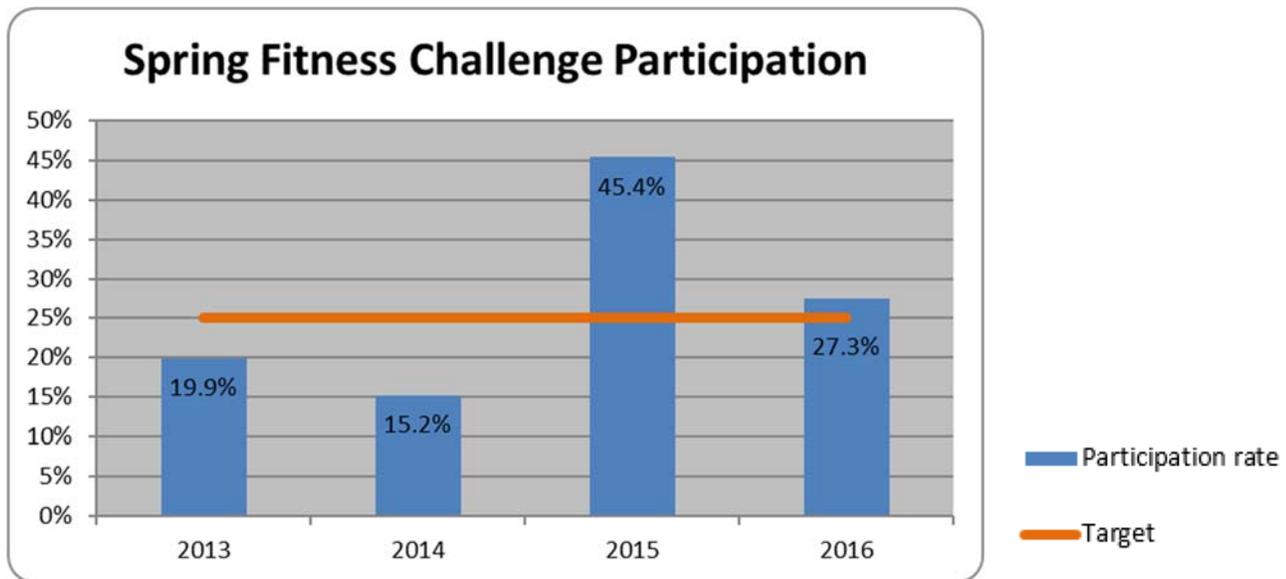
Injury and Illness Incidence Rate - Maintain an annual nonfatal workplace injury and illness incidence rate below that of the Local Government (Oregon) industry sector through a comparison of the Bureau of Labor Statistics' DART Rates (Days Away from work, Restricted work activity, or job Transfer).



The DART rate shows the relative level of injuries and illnesses among different industries or organizations. We compare our DART rate to the rate for Local Government, Oregon. These rates can

help determine both problem areas and progress in preventing work-related injuries and illnesses. Comparators for this rate lag about a year behind our data, which we calculate at the close of every calendar year. Our DART rate for 2015 remained below the industry comparator for the second consecutive year.

Spring Fitness Challenge Participation - Track employee participation in the Spring Fitness Challenge, a voluntary employee fitness program, with target participation at 25%.



In 2015, Spring Fitness Challenge participation reached an all-time high with 194 employees participating (43% of the workforce). The significant increase in this objective was a result of extra marketing efforts by staff and some small incentives. To encourage participation, in 2015 Sustainability Core Team members presented at department staff meetings, free pedometers were awarded to all participants, and some departments worked to create a more competitive atmosphere. In 2016, outreach and incentives were scaled back which resulted in a decrease in participation from the previous year.

Related Actions

Finance switches to electronic paystubs – Starting in mid-2015, Finance switched away from printing paper paystubs. Now, nearly all of the organization’s 400-500 employees (depending on the time of year) receive electronic paystubs through email for paychecks that are directly deposited into their bank accounts monthly. Annually, it amounts to a reduction of about 5,000 sheets of paper plus the necessary printer toner. Employees seem to like it too – only a handful opt for the printed version.

Sustainable Facilities

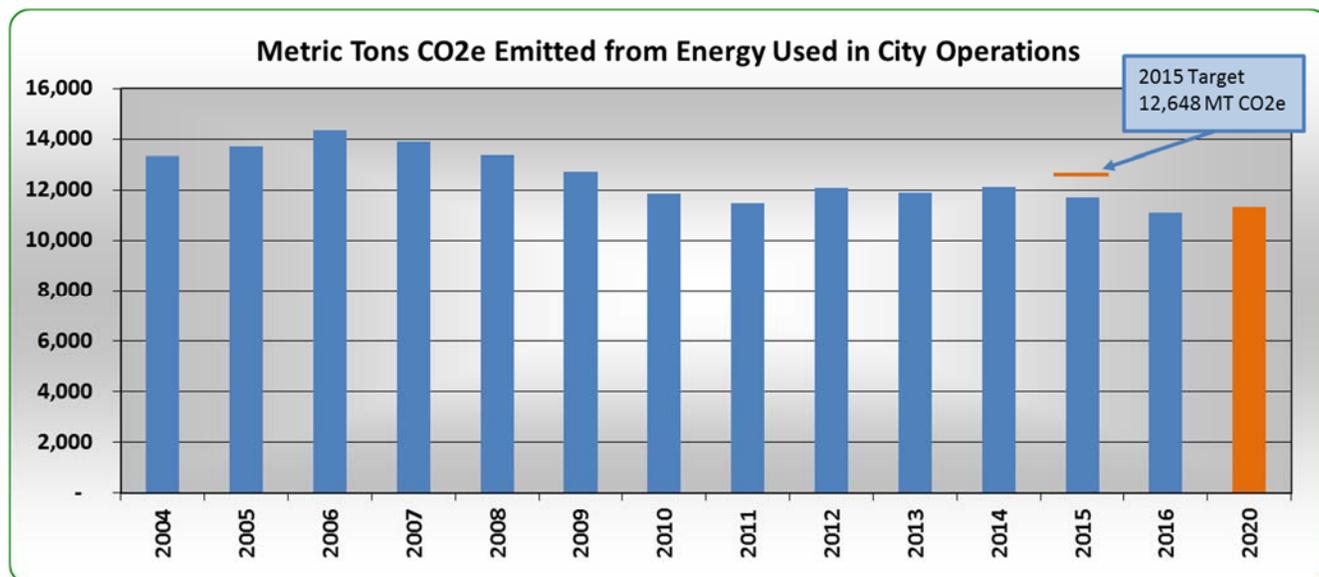
Sustainable facilities are those built, maintained, and operated in a manner that reduces energy, water, materials, and harm to human health and the environment. They include all occupied buildings and other facilities such as parks and pumping stations.

Our objectives for the Sustainable Facilities goal are to reduce water use and emissions from energy used in City operations. Staff tracks electricity, natural gas, and water use at City facilities to compare against baseline years and to measure progress toward reduction goals.

Greenhouse Gas Emissions from Energy Used in City Operations – Reduce emissions from energy used in City operations (e.g., facilities, streetlights, water, wastewater).

Targets
2015: 5% below 2004 emissions
2020: 15% below 2004 emissions

Baseline
2004 – 13,313 MT CO₂e



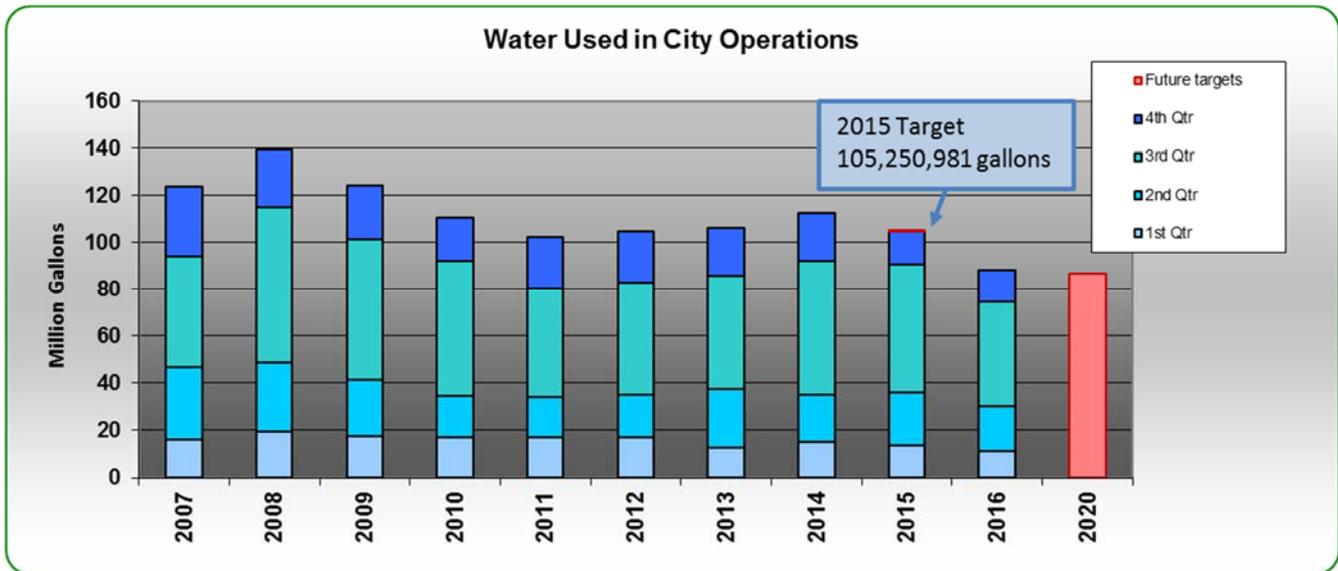
We achieved our 5% reduction target for 2015. In 2016, we surpassed the 15% reduction that was set for 2020. We are now operating with emissions from energy use 16.5% below those of 2004.

Our future targets for this objective will be updated this year to reflect the Corvallis Climate Action Plan target, which strives for a 75% reduction in greenhouse gas emissions by 2050 (as compared with 1990 levels), aligning with the State of Oregon target. This target equates to about a 3.2% reduction annually, factoring in projected population increases.

Water Used in City Operations – Reduce water use in City operations.

Targets
 2015: 15% below 2007 use
 2020: 30% below 2007 use

Baseline
 2007 – 123,824,684 gallons



We achieved our 2015 target of a 15% reduction from 2007 usage, with a drop of over 34 million gallons since our highest recorded usage in 2008. Usage in 2016 saw a big improvement with a drop of over 16 million gallons of water in one year. Much of the credit goes to a reduction in irrigation, which is partly due to favorable weather, but also to efforts to closely monitor irrigation, shift to water wise landscapes, and reassess the level of turf management in our Parks. Additionally, the organization has taken many steps to reduce building water use, including updating faucets, toilets, and showerheads, and more careful management of large water users like the pools at Osborn Aquatic Center.

Related Actions

Public Works solar array – The 208-kilowatt capacity project is situated on 21 acres at the Corvallis Public Works facility. Each year, the array's 732 solar panels will produce an estimated 227,000 kWh, or approximately \$20,000 worth of electricity that will be used to power City services. That is roughly 1.4% of the City organization's total electricity usage.



Airport solar array – The 75-kilowatt ground-mounted solar array was installed on a former E.P.A. Superfund Cleanup site, an ideal solution for acreage that otherwise would likely remain void of any development. The solar array uses a fully-ballasted racking system that required no ground penetrations, removing any concern about soil disturbance. The array will provide about 80% of the City's energy use at the airport.

With four City-owned solar arrays functioning, they provide about 3.4% of the organization's total electricity use. Combine that with the 7% renewable electricity purchased through Pacific Power's Blue Sky program and the City is using over 10% green electricity.



City funds covered just over 6% of the airport solar array with the remaining funds provided by Pacific Power and Energy Trust of Oregon.

Library lighting retrofit – More than 400 lights and fixtures were upgraded to LED technology, saving 82,000 kWh annually. At the same time, the total count of fixtures were reduced by 67 lights due to greater effectiveness in light output.

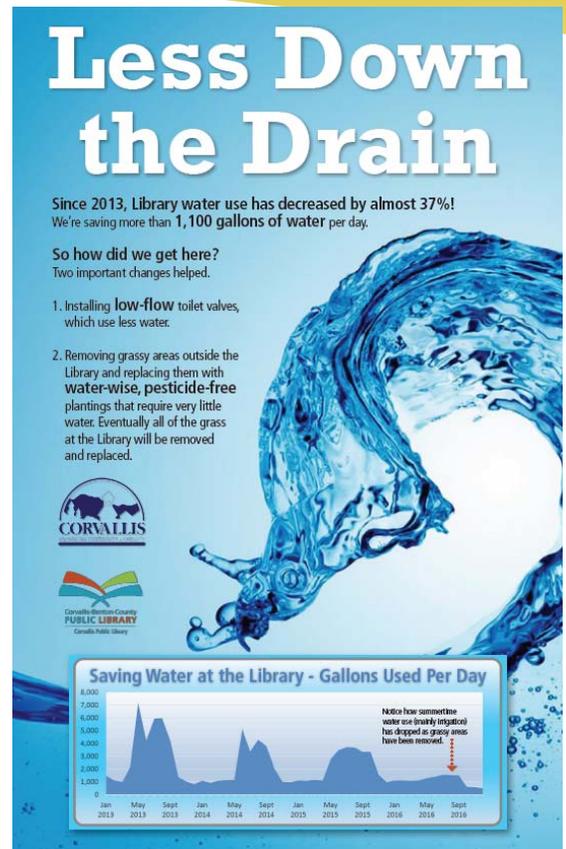
Library water saving projects - Serious attention has been paid to reducing water use at the Corvallis Benton-County Public Library and that focus has led to big water savings. Since 2013, the Library's water use has decreased 37%, or more than 1,100 gallons every day.

Two significant changes contributed to this: 1) installation of new flush valves on the toilets that allow users two flushing options, both using less water than the old toilets, and 2) removal of grassy areas and replacement with water-wise, pesticide-free plantings that require very little water. Eventually all the grass on Library property will be removed and replaced with this landscaping.

Parks & Recreation habitat restoration – As part of the ongoing habitat restoration at Herbert Farms Natural Area, Parks and Recreation partners planted over 35,000 native trees. The restoration is converting an agricultural field back into its natural riparian and upland prairie habitat. The trees and shrubs in the riparian area will provide habitat for a wide variety of native plants and animals. They will also provide much needed shade to a section of the Marys River, cooling the waters as they flow to Corvallis and the Willamette. As the trees grow and mature they will also sequester CO₂ from the atmosphere and reduce soil erosion from the former farm fields.

Parks and Recreation and its partners are beginning restoration work on the eastern fields. The goal is to convert the agricultural fields to a mixture of upland and wetland prairie and swales providing additional diversity and improved habitat for native wildlife such as the endangered Streaked Horned Lark.

LED Streetlight replacement - As of this writing, 782 streetlights have been retrofitted with LED bulbs. For perspective, we have about 3,000 streetlights in Corvallis. This is a small portion of all streetlights, but the fixtures that were the biggest energy-users have been the priority for replacement.



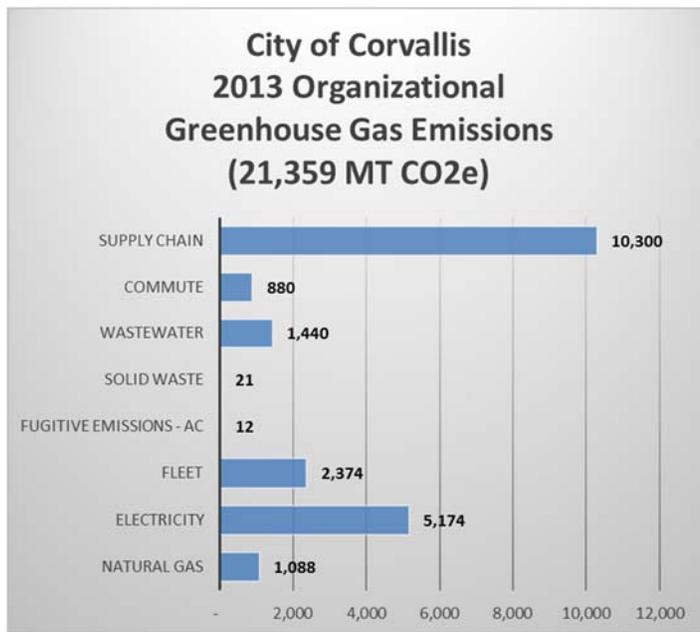
The costs, incentives, energy savings and payback to install LED bulbs are detailed below.

Cost to install LEDs in 782 streetlights	\$340,000
Incentives from Energy Trust of Oregon	\$52,000
Net cost	<u>\$288,000</u>
Estimated annual energy reduction	622,650 kWh
Estimated annual savings from energy reduction	\$90,000
Estimated payback (net cost / annual savings)	3.2 years

The expected payback period is 3.2 years. After that, the City will be saving money by upgrading to LEDs. The icing on the cake is the reduction of almost 5% in annual electricity use at a time when we are trying to identify ways to reduce greenhouse gas emissions in municipal operations. Those financial savings and emissions reductions will continue for many years. In addition, since LED bulbs have a much longer lifespan, maintenance needs will also be reduced.

Sustainable Purchasing

Sustainable purchasing considers the “Triple Bottom Line” of environmental, economic, and social impacts in purchasing decisions.



To reduce emissions, waste, and toxicity of city purchases, we strive to create green purchasing standard operating procedures for areas of highest impact, increase our purchases from local vendors, and include emissions from purchased goods and services in the City’s greenhouse gas inventory.

The Organizational Greenhouse Gas Inventory conducted for calendar year 2013 shows that emissions from the City’s purchase of goods and services comprised over 48% of our organizational greenhouse gas emissions. These purchases include machinery, operating supplies, services, vehicles, computer and electronics equipment, and many others. As a comparison, emissions from electricity use was

our second-highest category of greenhouse gas emissions at 24%.

This will clearly need to be an area of focus as we work to reduce our emissions over time. However, there is currently a limitation in our ability to quantify the effectiveness of our efforts to buy local or recycled or low-carbon content goods. Current greenhouse gas inventory tools provide a very limited

ability to measure the benefits of those efforts since they use only dollars spent by category as a way to determine emissions. Without a significant investment of time to track and quantify the emissions reductions associated with climate sensitive purchasing, it is nearly impossible to effectively determine the benefits.

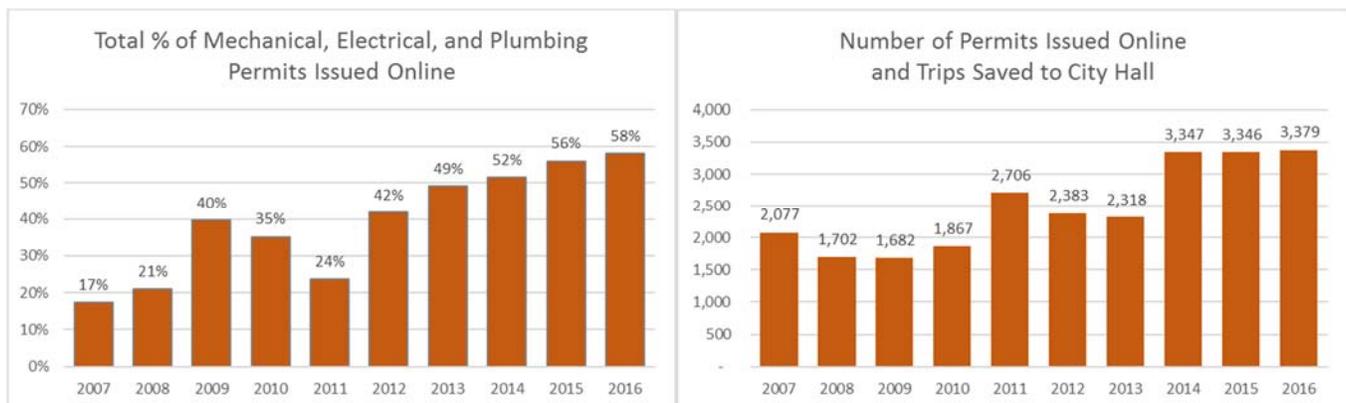
Related Actions

Fire’s ambulance box – In December 2014 Corvallis Fire Department experienced a vehicle accident involving an ambulance. The chassis was a total loss, but the module attached to the chassis was repairable and could be returned to service. The Fire Department determined the most viable option was to replace the chassis and remount the module.

The department was able to purchase a four wheel-drive chassis (rather than the old two-wheel drive version) and add upgrades to the suspension. These upgrades make it easier and safer for crews to access service areas during inclement weather and they decrease maintenance requirements. Additionally, all possible lighting, including in the patient module, has been converted to LED, which requires a lower draw on the alternator and thus reduces energy costs while providing a longer lamp life and lower overall operating costs. Finally, the vehicle is capable of being shut down while on scene, which will significantly lower operating costs due to lower diesel usage.

Development Services’ ePermits - Development Services directs all mechanical, electrical, and plumbing permit requests to the City’s website where users can electronically submit their permit applications. The number of requests using this method have grown steadily since the process started in 2007. Most recently, work was completed on an entirely online permit process available to all projects. This includes online application, electronic document submittal and plan review, online payment, online inspection requests, and emailed inspection notices. Since July 2015, over 4,500 inspection results have been emailed rather than a paper copy left on site.

The following charts show an increase in use of the ePermit service, which translates into real cost savings to contractors and trips saved to City Hall.



Information Technology's computer purchasing, use and disposal - For the fifth year in a row, the City of Corvallis has been awarded the highest level of recognition from the State Electronics Challenge—a national environmental stewardship program—for our achievement in decreasing the environmental impact of computer and electronics equipment.



The Information Technology (IT) team achieved these results in three ways. First, we only purchase computer equipment that meets Electronic Procurement Environmental Assessment Tool (EPEAT®) standards for energy efficiency and reduced toxicity during manufacturing. Second, the organization works hard to maximize efficiency of that equipment during use through energy management and paper reduction programs such as operating in energy-saving mode, turning off computers at night and double-sided printing. Finally, at the end of its useful life at the City, computer equipment is either donated for reuse in the community or responsibly recycled.

Vehicle Carbon Footprint

Cars, trucks, heavy equipment, transit buses, lawnmowers, and utility vehicles are essential to City services, but they create considerable greenhouse gas emissions from petroleum-based products. The City aims to reduce its vehicle carbon footprint by decreasing fossil fuel use. This will be achieved by purchasing more energy-efficient and alternative-fuel vehicles, changing driving behavior, and increasing the use of lower carbon fuels.



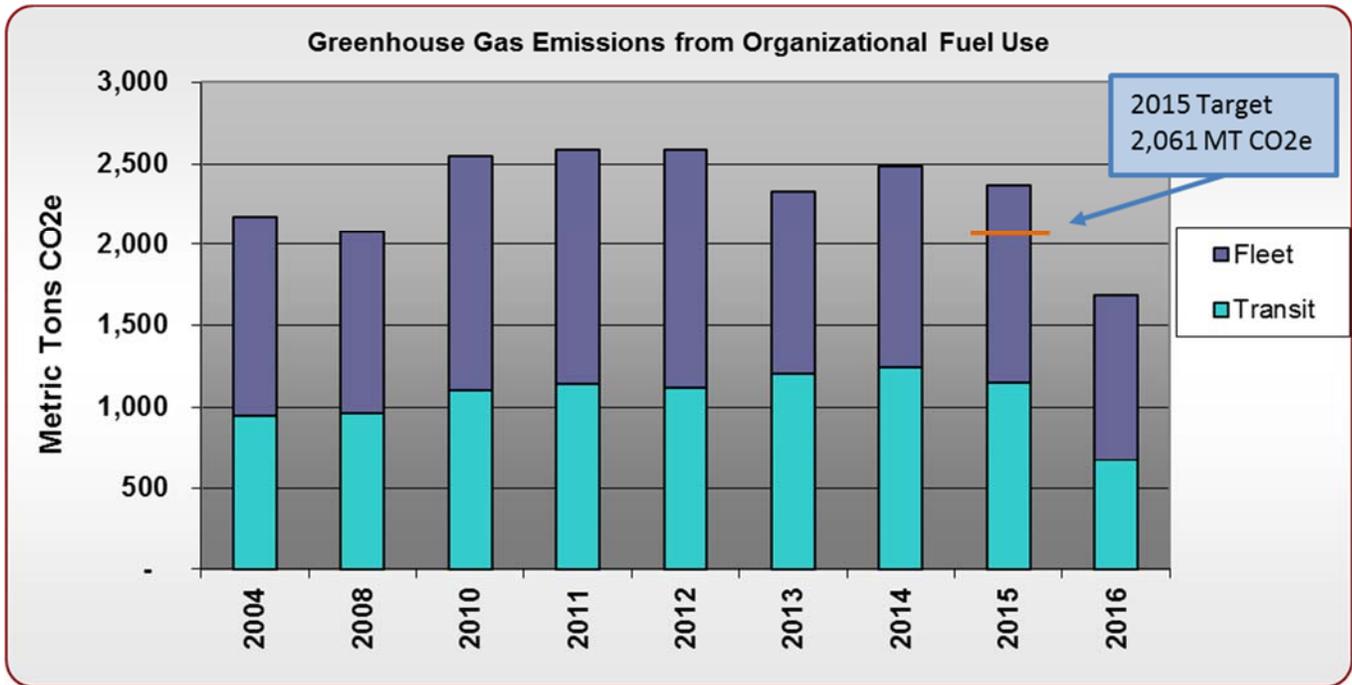
A City Transit bus refuels with renewable diesel.

The amount of fuel used by the organization increased about 11,600 gallons over the past two years, from 201,726 in 2014 to 213,325 in 2016. In October 2015, City fleet and transit vehicles began to test renewable diesel as a substitute for the biodiesel blend (B5) we had been using. Renewable diesel fuel is made from vegetable oils and animal fats. It burns significantly cleaner than regular diesel or biodiesel and provides more power to the engine. Mileage is improved by about 6% and the cost is currently only a few cents more per gallon. We began using a mix of 50% diesel and 50% renewable diesel (R50) in October 2015 and saw a slight drop in greenhouse gas emissions for the year. After experiencing no problems and better performance in nearly all the fleet and transit vehicles, in May 2016 we switched to a mix of 1% diesel and 99% renewable diesel. Maintenance is down and the reduction in greenhouse gas emissions is significant.

Greenhouse gas emissions from City vehicles - Reduce greenhouse gas emissions from City vehicles (fleet, transit)

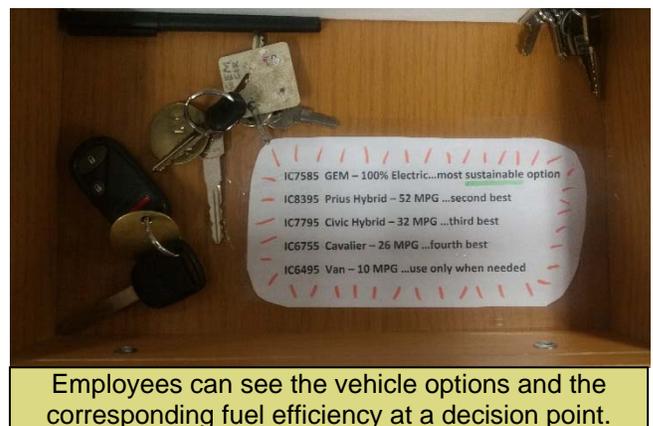
Targets
 2015: 5% below 2004 emissions
 2020: 15% below 2004 emissions

Baseline
 2004: 2,172 MT CO₂e



As the chart shows, since the introduction of renewable diesel as a replacement for biodiesel, our emissions have declined dramatically. In 2015, we did not achieve our target of a 5% reduction in emissions compared to 2004, but the switch to R50 happened late in the year. By 2016, we had a full year of renewable diesel, seven months using R99. That led to a 19% reduction in emissions from fuel use compared to 2004, helping us surpass our target for year 2020.

Future targets for this objective will also be updated this year to reflect the Corvallis Climate Action Plan target, which strives for a 75% reduction in greenhouse gas emissions by 2050 (as compared with 1990 levels). This equates to about a 3.2% reduction annually, factoring in projected population increases.



Employees can see the vehicle options and the corresponding fuel efficiency at a decision point.

Related Actions

Library's Book Bike – In looking for new ways to reach out to the community, the Corvallis-Benton County Public Library invested in a book bike. After researching various options and hearing about the success of book bike programs at other libraries, the library moved forward with a bike shop specializing in customizing book bikes for libraries.

Imagine a full-service library on a customized bicycle that easily pedals through town to various destinations such as schools and street fairs. No gas necessary because it's people-powered, making it green, budget-friendly, healthy for staff, and a particularly good fit with Corvallis' bike-friendly identity.

The book bike is customized to hold over 200 pounds of books, tools and crafts and transforms to open up and display library resources. It also provides opportunities for pop-up story times, library card sign-ups, and books, DVDs and music available for check out. The librarian staffing the bike provides reading suggestions and information about all the Library has to offer.



Waste Reduction

The waste reduction goal encourages staff to not only reuse and recycle, but also to prevent waste by reducing consumption and considering 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.

Waste from City operations - Reduce waste from City operations sent to landfill.

Targets

2020: 50% reduction from 2009 baseline
2030: 90% reduction from 2009 baseline

Baseline

2009 - 186 tons of waste to landfill from City operations.

City-collected public waste - Reduce City-collected public waste sent to landfill (e.g. from Library, parks etc.)

Targets

2020: 50% reduction from 2009 baseline
2030: 90% reduction from 2009 baseline

Baseline

2009 - 202 tons of waste to landfill from the public collected by the City.



Waste tonnage increased by roughly four tons in 2015 and 19 tons in 2016 compared to the previous year. Waste to the landfill has been increasing steadily since 2013, when it was nearly 14% below 2009 levels. We are now at 4.4% reduction since we began tracking. Significant progress needs to be made to achieve our organizational goal of a 50% reduction by 2020.

Related Actions

Public Works housecleaning - Whether it's due to equipment changes or process changes, old materials from past projects tend to pile up over time. Nearly every division at Public Works participated in a major inventory and housecleaning project to identify materials that are no longer relevant to operations. The variety of materials needing to be disposed of was mildly astounding (some examples: an old trailer pump used for irrigation (and badly rusted), railings, welders, old auto service manuals and parts, culverts, bus shelters, bricks and pavers, and utility poles). That wide variety meant we needed to get creative in how we disposed of them. If possible, we try to get some money for the items using Oregon State Surplus Property's OSUsed Store and online market. If it is unlikely to sell, then donation is a possibility, though it can be difficult to connect with interested parties. Finally, if selling or donation are not possible, the item is broken down into recyclable parts and garbage. Most of the items had some value with over \$13,000 raised to date – not bad for a housecleaning project.

Sustainability in the Community

Although the primary focus of the sustainability program is internal operations, the City also is involved with community sustainability efforts primarily through collaboration with community groups and through the on-the-job and volunteer efforts of our employees. Some of the collaborative projects include:

Housing and Neighborhood Services working for energy efficient homes – Federal HOME funds were invested in two projects that began construction during FY 15-16 and will be completed in FY 16-17. The first is a 12-unit rental project, Seavey 3, being built by Willamette Neighborhood Housing Services in northeast Corvallis. The project is constructed to Earth Advantage Silver standards, including Energy Star appliances and building systems and components with a minimum 30-year life.

The second project, a single-family unit, is being built on SE Kendra Place by Benton Habitat for Humanity. The home will receive Passive Home certification upon completion, which will reduce energy consumption by 80-90% relative to standard construction methods. The home will be heated primarily through “passive” energy gains from the occupants, light bulbs, windows, and appliances versus an “active” heating system. Because of the high energy efficiency in both of these projects, the residents will benefit from low monthly energy costs, which will in turn make their housing more affordable.

City Council’s Climate Action goal - Progress on the Climate Action Plan is described earlier in the document. This section focuses on the other part of their Climate Action goal, the Georgetown University Energy Prize, or GUEP. This Prize is a competition between 50 cities that will award \$5 million to the community that reduces residential and municipal energy use the most over a two-year period (2015-2016). The Take Charge Corvallis! effort, managed by the Corvallis Environmental Center, worked across the city to encourage residents to increase their energy efficiency. The City bolstered that effort with a donation of 35,000 LED lightbulbs to be distributed throughout the community. Collectively those lightbulbs will reduce our community’s energy use by an estimated 2.7 million kWh per year at an annual savings of \$250,000 – more than twice the amount of money that was invested – along with a reduction of 1,900 tons of CO₂e. The City did its part to contribute to the community energy reductions through the implementation of several projects, such as lighting upgrades, wastewater energy studies, and retrofitting streetlights with LEDs.



The second city-owned solar electric generation project, installed in 2013 on Fire Station 1.

Alternative transportation - There are many ways in which the City supports alternative transportation in the community. Aside from the fareless City transit service, there are several examples where we encourage residents to get around safely without an automobile:

- The Library collaborated with several community organizations, including the Corvallis Bicycle Collective, to offer several excellent programs on bicycling. They included bicycle repair workshops, bicycle touring with youth, riding bicycles with children, and car-free living.
- Public Works staff added 26 bicycle parking spaces in high-demand areas downtown (and Parks and Recreation staff added another six). This includes the installation of a 16-space pilot on-street bicycle parking corral at the northeast corner of NW 2nd Street and Jackson Avenue. The installation occupies a previously unused yellow curbed area and is configured to accommodate bicycles with trailers.
- The Police Department, Public Works staff, and volunteers from the Mid-Valley Bike Club held a "Light it Up" event at the intersection of SE Crystal Lake Drive and SE 3rd Street, installing more than 80 front and rear light sets on unlit bicycles.



Water quality - Maintaining the quality of water in our streams and rivers has many downstream effects that help our community and others:

- The Police Department participated in the annual Drug Take Back event at Republic Services. More than 200 vehicles and cyclists passed through the event, dropping off over 320 pounds of prescription drugs to be destroyed responsibly, keeping them out of the wastewater system.
- The City of Corvallis high-efficiency toilet retrofit incentive program provided 286 rebates during 2015 and 2016. Over the life of the fixtures, staff estimates these efficient toilets will use 20-44 million fewer gallons of water.
- Public Works, in partnership with the Marys River Watershed Council and the Corvallis Sustainability Coalition, sponsored a stream clean-up event. More than 20 community volunteers helped remove about 2,200 pounds of trash from the Mill Race in South Corvallis.

Looking Ahead to 2017

Each year, the City’s Sustainability Steering Committee and Sustainability Core Team work with the sustainability program to develop a work plan within each sustainability goal area. Departments, work groups, or individuals are identified as champions of each project, with projects expected to be completed within the year. For 2017, the following areas have been highlighted:

2017 Sustainability Work Plan

Goal: Employer of Choice
Conduct a City-wide Employee Engagement Survey and develop an action plan based on survey results.
Develop and implement a supervisor training program.
Goal: Sustainable Facilities
Adjust targets for Sustainable Facilities goal to align with the Climate Action Plan – 3.2% reduction annually.
Identify and target water efficiency improvements where the highest water usage and losses are occurring.
Investigate transition to non-fossil fuel alternatives for back-up generators
Goal: Sustainable Purchasing
Develop purchasing criteria for furniture and carpet purchases that consider recycled content and Indoor Air Quality issues (e.g. heavy metals, phthalates, flame retardants, perfluorochemicals, volatile organic compounds, and chlorinated compounds).
Evaluate and monitor street trees and vegetation and modify species selections as appropriate to address climate change.
Goal: Vehicle Carbon Footprint
Adjust targets for VCF goal to align with the Climate Action Plan – 3.2% reduction annually.
Goal: Waste Reduction
Develop and implement a construction and demolition waste management plan.

Conclusion

The City of Corvallis continues to take strides towards resource efficiency, toxics and waste reduction, and employee well-being. Much like sustainability itself, the end destination remains elusive and far in the future. While we never waiver from our mission of serving the community, we remain dedicated to reducing the impacts of the services we provide.