



THE CITY OF MILWAUKIE SUSTAINABLE CITY PLAN

Final Draft

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THE CITY OF MILWAUKIE SUSTAINABILITY COMMITTEE

The City of Milwaukie Sustainability Committee (or “S-Team”) is made up of volunteer City staff from a variety of departments and each City facility. The S-Team meets on a monthly basis, and also works in smaller Action Teams. The S-Team includes:

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I. MILWAUKIE – A COMMITMENT TO SUSTAINABILITY

Sustainability is defined generally as the use of a resource so that the resource is not depleted or permanently damaged. Ensuring a more sustainable Milwaukie means working throughout the city, within municipal departments, and, eventually, out in the community with citizens, businesses and organizations to meet the needs of the present without compromising the ability of future generations to meet their own needs. It means coordinating efforts to use resources efficiently, reduce waste, prevent pollution and environmental impacts and more. It means taking into account our shared objectives for a healthy environment, quality of life and economic vitality.



Climate change is a glaring symptom of why doing business as usual is no longer sustainable. Local governments have the power to affect the main sources of pollution directly linked to climate change: energy use, transportation, and waste. Cities have an opportunity to lead by example and make changes that can help reduce the level of carbon released into the atmosphere. Cities control the day-to-day activities that determine the amount of energy used and waste generated by their community - from land use and zoning decisions to control over building codes and licenses, infrastructure investments, municipal service delivery and the management of schools, parks, and recreation areas. A widespread municipal acknowledgement of this municipal responsibility resulted in the development of the US Conference of Mayors Climate Change Agreement. In 2007, the Milwaukie City Council adopted this agreement and, with this document is establishing a plan for pursuing its goals.

The Milwaukie City staff has played an active role over the past ten years in identifying ways that the City can use its

resources more efficiently and act more sustainably. In 1996, the City was awarded grants from Metro and the Department of Environmental Quality to hire a Resource Efficiency Coordinator to complete evaluations of City-owned buildings and their resource use in the areas of solid waste, energy, water and fuel. Several efficiency measures were implemented at City facilities as a part of this effort. While a permanent staff committee would not be formed for several years, these efforts demonstrate the City's early awareness and interest in action regarding sustainability.

In 2007, the City formed a Sustainability Team in order to enhance sustainable practices used by City employees at its facilities. One of the major tasks undertaken by this team was to develop and adopt a Sustainability Plan to guide the City's on-going activities. The Milwaukie Sustainable City Plan looks specifically at City-owned facilities and the public fleet of vehicles. The Plan will be expanded in 2009 and beyond to include actions that may be taken by City residents and business owners.

The following events illustrate the highlights of Milwaukie's more recent sustainability efforts:

- Spring 2007 – Milwaukie Sustainability Committee (the “S-Team”) formed. The team has members from a variety of City departments and meets on a monthly basis.
- July 2007 – Energy Trust of Oregon conducted energy audit of four City buildings.
- September 2007 – The Milwaukie City Council adopted the US Conference of Mayors Climate Protection Agreement.
- February 2008 – The City offered the first employee training session on the basic principles of sustainability.
- March 2008 – City employees dedicated a community garden in front of the Johnson Creek Building. Employees will continue to use the garden to grow organic produce and plan to donate produce to local shelters and retirement facilities.
- March 2008 – The City of Milwaukie became a member of the International Consortium of Local Environmental Initiatives. This organization is comprised of local government members actively working toward sustainable goals.
- Spring 2009 – The Sustainability Committee plans to submit the Milwaukie Sustainable City Plan to City Council for discussion and vote.
- Ongoing – City-owned facilities continued to use basic conservation principles in day to day operations - like using green cleaning products, using low energy light bulbs, recycling, etc.

II. THE NATURAL STEP FOR MILWAUKIE

The City of Milwaukie’s Sustainable City Plan is founded on the principles of The Natural Step Framework (TNS). TNS is one of the best-known approaches to explaining sustainability and is based on principles describing how nature and societies use their resources. The Natural Step framework is



intended to serve as a foundation, and recognizes the interconnections between resource use, the environment, and human needs. It also allows our community to use a common set of tools to address specific Milwaukie issues. The Milwaukie Sustainability Team recommends that the City of Milwaukie use the Natural Step as a general framework to introduce employees to the importance of sustainability.

The Oregon Natural Step network was formed to support Oregon business, governmental, and educational organizations. The framework encourages dialogue, consensus building, and systems-thinking (key processes of organizational learning) and creates the conditions for profound change to occur.

From a business perspective, The Natural Step framework enables organizations to intelligently, and profitably, integrate environmental considerations into strategic decisions and daily operations.

The Natural Step’s Four System Conditions are summarized below. Organizations measure their actions against these conditions.

In a sustainable society:

1. Fossil fuels, metals, and other minerals cannot be extracted at a faster rate than they can be re-deposited.

Or, can the earth replace what we take ?

2. Toxic substances must not be produced at a faster rate than they can be broken down in nature, and synthetic compounds that do not break down must be systematically eliminated.

Or, are we poisoning the earth, air or water?

3. We critically examine how we harvest renewable resources and adjust our consumption and land-use practices to fall well within the regenerative capacities of ecosystems.

Or, do we respect the biodiversity of plants and animals?

4. There must be a fair and efficient use of resources to meet human needs (locally and globally).

Or, are the choices we make fair and equitable?

III. FOUR AREAS OF ACTION

The Plan focuses on City operations. The S-Team selected four important resource areas to concentrate City efforts on. Positive changes in these four areas will have a strong impact on the overall health and long-term sustainability of the Milwaukie community.

i. WASTE REDUCTION

Reduce the amount of solid waste produced at City facilities and at public meetings hosted by the City.

iii. PROCUREMENT

Develop a purchasing plan to guide the City in obtaining the most resource-efficient goods and services possible.

ii. ENERGY AND FOSSIL FUEL CONSUMPTION

Reduce energy use, fossil fuel use and greenhouse gas emissions related to the operation of City-owned facilities and public fleet of vehicles.

iv. ONGOING CITY COMMITMENT & EDUCATION

Foster continued support for the Plan with regular communication to elected officials, all City employees and the general public recognizing the efforts of City staff and by allocating resources to support those efforts.

The team then developed specific activities within each action area. The group prioritized the selected activities into specific milestone target dates, with a beginning date of 2009; one year (2010); five years (2014), ten years (2019) and, in some cases twenty years (2029).

As mentioned above, the Plan focuses on actions to be taken specifically by the City, in and around City-owned facilities. The S-Team would like to expand this in the future and develop action areas to be addressed by other parts of the community (such as our residents and businesses).

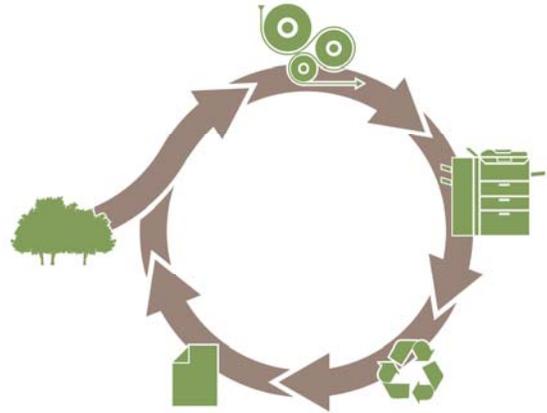


ACTION AREA – WASTE REDUCTION

The primary goal of this action area is to reduce waste generation and increase recycling within City facilities, thereby reducing the quantity of waste the City sends to the landfill.

Current State:

- Milwaukie City Council has reduced material consumption at its meetings. Pitchers of water have replaced individual water bottles and reusable flatware has replaced disposable flatware.
- An inventory of all existing waste containers (number, size and collection frequency) has been conducted at all four City buildings.
- Waste audits were conducted at all four city buildings in March 2008 to determine what volume of trash was being disposed and to evaluate the general composition of waste in the containers.
- City has provided “side bins” (that attach to all garbage cans) for recyclable items to all employees at all City buildings where this collection method is appropriate. The “side bins” are hung on the side of existing trash containers at employee workstations. These have been provided at City Hall, the Library and JCB. (PSB declined use of the side bins but has central collection bins in all areas of the building).
- Fliers, describing what materials can be recycled at City buildings were distributed to all city employees.
- Internal and external collection containers at all four city buildings were evaluated and adjusted based on need and materials generated.
- Compost bins have been installed at City Hall and JCB for food scraps and other organic material.
- Ledding Library recycles used toner cartridges for the City of Milwaukie through Toner Ink.
- The Sustainability Team is working with Information Technology to determine the best methods for introducing duplex printing at workstations throughout the City.



Milestones (Proposed Actions) – by 2010:

Decrease waste production by:

- Providing cloth towels near all kitchen facilities as an alternative to paper towels (coordinate washing).
- Providing reusable utensils and napkins for employee use at all facilities.
- Making available reusable shopping bags at all City facilities for City shopping.



Eliminate all recycled materials from the City’s regularly occurring waste stream:

- Educate employees regarding what is recyclable.
 - Put signs in central and break areas.
 - Conduct brown bag lunch training.
 - Distribute recycling flier regularly and post on intranet.
 - Encourage use of compost bins where available.
- Conduct spot checks—show employees what they are throwing away.
- Educate employees on reducing paper use.
 - Print both sides when possible.
 - Reuse paper when possible (one sided copies for drafts).
 - Print only when necessary (and only what is needed).

Reduce Paper Consumption:

- Determine key paper uses (e.g. bulk mailings, bills) and develop ways to reduce paper use for these activities:
 - Establish electronic bill pay
 - Provide Pilot electronically
- Default printers to duplex.
- Provide “single sided copy” bins near all printers.
- Encourage employees to re-use paper when possible.

Performance Measures:

- Track waste generation and reduction by:
 - Conducting an annual waste audit at all City Buildings for one month. Audits will monitor number of external waste collection containers, frequency of collection required, volume of waste in each container and general composition of waste collected.

Milestones (Targets) - By 2014

- Decrease waste production (as measured by reducing the capacity of solid waste containers by one size and/or reduce the frequency of waste removal services at each City building.)
- Eliminate all recyclable materials from the City's regularly occurring waste stream. (This does not include all waste generated by special City events, although recycling services will be made available at City events).
- Reduce recyclable paper generation (use) within the City to 50% of 2008 levels.



ACTION AREA – ENERGY & FOSSIL FUEL CONSUMPTION

Goals:

The primary goals of this action area are to reduce the City's energy and fossil fuel consumption and thereby, its greenhouse gas emissions.

Current State:

- Energy Trust of Oregon conducted energy audit of four City buildings in July 2007.
- Signed Mayors' Climate Protection Agreement and joined Cities for Climate Protection Campaign; received tools to conduct greenhouse gas emissions inventory.
- High-efficiency pumps are specified when wastewater lift station pumps are replaced.
- New or upgraded water pump stations have high efficiency pumps and motors to meet future capacity in a more energy efficient manner.
- Lighting fixtures in most city facilities have been upgraded to T-8.
- City Fleet includes one hybrid gas/electric vehicle.
- Heating and Air Conditioning controls have been upgraded to operate more efficiently.
- A bike fleet program is in place for employees to travel between city facilities.



Milestones (Proposed Actions) – By 2010

Energy

Inventory greenhouse gas (GHG) emissions from City operations and develop emissions reduction action plan.

- Evaluate costs of purchasing renewable electric energy (wind, solar, thermal) for all city facilities.
- Identify energy efficiency standards for equipment, appliances, and vehicles and include environmentally preferable purchasing (EPP) policy and coordinate with Procurement Team.
- Evaluate areas to invest in energy efficient upgrades at all City-owned facilities.
- Identify and budget one building efficiency upgrade.
- Conduct feasibility analysis of installing solar panel at all facilities.

Fleet

Conduct a fleet needs assessment and develop a green fleets plan to increase vehicle MPG, reduce GHG, and improve overall maintenance and vehicle longevity.

- Pursue state grant to retrofit diesel fleet with emissions reduction equipment.
- Decrease fossil fuel consumption of City-owned fleet vehicles by 5% over next two years.
- Establish minimum emissions standard by vehicle class.
- Switch from B20 to B99 for most diesel vehicles, at minimum during summertime operations.
- Train City employees with driving responsibilities in more efficient driving and idling techniques.

Milestones (Targets) – By 2014

Energy

- Develop green building policy and adopt Leadership in Energy and Environmental Design (LEED) Silver as the standard for new City buildings and remodels.
- Reduce energy consumption of electricity (kWhs), natural gas (BTUs) and fossil fuels by 5% from 2006 levels.
- Reduce greenhouse gas emissions to 10% below 2007 levels, in keeping with the US Mayors' Climate Protection Agreement. (Greenhouse gas emissions will be measured by reduced emissions of gases such as carbon dioxide, methane, carbon fluorocarbons and related gases. The City will work with its utility partners to determine a baseline for existing facilities and a possible course of action.)
- 50% of energy consumed is from renewable resources (on-site and from electric utility).
- 25% of City fleet is fueled by alternative fuels/technology.
- Increase overall vehicle miles per gallon (MPG) by 10% across the entire fleet.
- New construction and major remodels of City-owned facilities meet or obtain LEED Silver certification.

Sustainable End Point Goals- By 2029

- Zero net increase of carbon and other greenhouse gas emissions (climate neutral).
- Energy sources are 100% renewable.

Performance Measures:

- Track annual facility and infrastructure energy use by:
 - Total citywide consumption.
 - Report by facility, account number and department.
 - Quantify renewable energy use.
 - Measure carbon footprint of all buildings.
 - Number of City buildings that meet or exceed LEED Silver.
- Track annual fleet energy use by:
 - Vehicle miles traveled or hours operated.
 - Gallons of fuel, by type, consumed.
 - MPG ratings, including operating and maintenance cost.
 - Measure carbon footprint of all vehicles in City fleet.



ACTION AREA – PROCUREMENT

The primary goal of this action area is to create a City procurement system that includes environmental and social welfare considerations, as well as cost considerations.



Current State:

- Green Seal cleaning products purchased through Coastwide Labs, a local vendor, are used in all City buildings.
- Procured 100% post- consumer recycled copy paper through Multnomah County. Began a six month pilot program for testing paper at Johnson Creek Building, beginning September 2008.
- Began evaluating preferred vendors for office supplies with regard to sustainable practices and recycled products offered.
- Purchased Toyota Prius Hybrid for Johnson Creek Facility in summer of 2007
- The City’s newsletter, The Pilot, is printed on Forrest Stewardship Certified (FSC) paper using soy inks at an FSC printing plant.

Milestones (Proposed Actions) – by 2010:

- Begin City-wide departmental audit to identify areas where sustainable purchase options are applicable.
- Develop procurement guidelines that establish a preferred procurement hierarchy.
- Train City employees responsible for purchasing to follow Procurement Guidelines.
- Develop and implement financial tracking system to track percentage of environmentally preferred purchases made per department.
- Begin shifting all City paper stock to stock which contains 30% post consumer waste, is acid free, FSC certified, and is printed with soy-based ink.

Milestones (Targets) – By 2014

- Increase the percentage of total materials and services purchased that meet environmentally preferred procurement program.
- Perform annual audits via financial tracking system of products purchased to ensure minimum sustainable percentage.

Sustainable End Point Goals – By 2029

- All products and services purchased consider environmental impact with regard to percentage of recycled materials, sustainable sources, reuse and/or recycling options, and socially responsible providers.
- Environmentally preferred (non-toxic) options replace all chemicals and materials used throughout City facilities.

Performance Measures:

- Adopt a preferred procurement hierarchy for the City in 2010 and develop a financial tracking method to monitor the quantity and the cost of buying sustainable products
- Report to Council annually on the percentage of sustainable purchases by department and measure cost differences



ACTION AREA – ONGOING CITY COMMITMENT & EDUCATION



Goals:

The goal of this action area is to support the City’s ongoing commitment to sustainability through comprehensive outreach to Milwaukie employees, our elected officials and the community regarding the City’s sustainable actions and policies.

Current State:

- Provided sustainable education training in February 2007 available to all employees.
- Hosted Master Recycler Plastics Roundup in October 2008.
- Became a member of the International Council for Local Environmental Initiatives (ICLEI.)
- Began Sustainability Corner in the City newsletter, The Pilot, featuring updates and information regarding the City’s efforts toward sustainability as well as general educational information.

Milestones (Proposed Actions) – by 2010:

- Develop annual budget for needed resources to support the implementation of the Plan.
- Launch “Sustainability in Milwaukie” website on the City Intranet.
- Begin creating “Sustainability in Milwaukie” internet website for citizen and community use.
- Include updates, information, tips and book suggestions on intranet website for employees and internet website for citizens.

Milestones (Targets) – By 2014

- Provide regular brown-bag lunch classes for employees on sustainability topics.
- Host annual events such as Master Recycler Plastics Roundup, Earth Day events, etc.
- Establish City-wide policy for employee education, including new employee training requirements.

Sustainable End Point Goals – By 2029

- Fully integrate sustainability principles into all decisions and actions taken regarding City business and operations.

Performance Measures:

- Report to City Council annually on the number of educational events, articles and various outreach efforts.
- Periodically conduct a poll of City employees to determine level of effectiveness in changing behavior and attitudes around sustainable practices.

