

MANITOU SPRINGS CLIMATE ACTION PLAN

Approved Unanimously by City Council June 17, 2008

Dedicated to Kathy Verlo for her passion for sustainability and contributions to this effort. She will be missed.

BACKGROUND

The following goals and objectives were developed with extensive involvement from community members (both Manitou residents and volunteers who live outside of Manitou), staff, and City Council members. These goals and strategies for reducing greenhouse gas emissions began to take shape with the formation of the Manitou Climate and Air Quality Committee in 2006. The five action teams established by the Committee drafted and revised the goals beginning in the summer of 2007. The teams included the Residential, Business and Economic Development, City, Waste Reduction and Recycling, and Events, Education and Outreach Action Teams. Further community input was solicited at the November 2007 Climate and Energy Extravaganza.

GOVERNMENT

- 1) New City facilities, including additions, should be LEED or Green Building certified.
- 2) Investigate micro-hydro generation opportunities at the City water plant, geothermal heating and cooling for City Hall, small wind generation capacity in discrete locations, and compatible solar panels for City facilities.
- 3) Negotiate renewable energy opportunities with Colorado Springs Utilities.
- 4) Continue conducting energy audits of City facilities.
- 5) Implement cost-effective energy saving improvements (e.g., install energy-efficient fixtures, install low-flow water fixtures, switch out light bulbs, replace insulation, update heating/cooling appliances, etc. using Energy Star rated products).
- 6) Work with CSU to improve street light energy efficiency.
- 7) Encourage City employees to conserve energy.
- 8) Investigate the use of energy efficient vehicles and alternate fuels.
- 9) Promote the use of bio-fuels, including the collection and processing of cooking oil as fuel.
- 10) Promote walking, biking, car-pooling, and transit use for those commuting to and from Manitou Springs.
 - a) Provide bus passes to all City employees who regularly commute via bus.
 - b) Establish a park-n-ride area on the east end of Manitou Avenue.

RESIDENTIAL

Carbon Reduction Checklist and Pledge

The Residential Action Team developed a checklist of simple, inexpensive things people can do at home to reduce their carbon footprint. The checklist includes a pledge to reduce household carbon emissions at least 10 percent by 2010 and space to list three measures signatories will implement to accomplish that goal. The Team seeks to collect pledges from 1,000 households at events, through the Committee's web page, through school programs, and at a booth at the summer Midweek Farmers' Market.

Outreach through Schools

The Residential Action Team will work with School District 14 administration and teachers to develop a greenhouse gas and energy conservation education program for the 2008-09 school year which will incorporate the Checklist/Pledge.

Interfaith Power and Light Program

The Residential Action Team will encourage Manitou's houses of faith to participate in the Fellowship Energy Reduction program and ConservED, a project of the Interfaith Power and Light for congregations (Includes a study group guide and four free CFLs as well as a low-flow showerhead for each group participant) and start study groups. Group participants track and tabulate their savings in carbon emissions. They also have a Youth Energy Outreach Program, which we hope to utilize.

Promote the LEAP and Energy Resource Center Programs

Promote participation in the LEAP assistance program for free weatherization by the federal program locally operated by the Energy Resource Center. Their service includes wall insulation, new refrigerators and furnaces if warranted, ceiling insulation, and infiltration work on homes of both renters and owners.

There are approximately 2,670 homes in Manitou Springs and it is estimated 20 percent of households qualify for this service. We will advertise and promote these programs to get qualified, interested households to request this free service. We will endeavor to discern how many Manitou Springs families have participated in this service since 2005 to add to our quantification goals.

Free CFL Distribution

By the end of 2008, the Manitou Climate and Air Quality Committee will have overseen the distribution of 1,584 free CFLs donated by Colorado Springs Utilities. We will endeavor to distribute 1,500 more free CFLs by the end of 2009.

Promote CSU Renewable Energy Rebate Programs and Energy Efficiency Rebates

Through education and outreach, we will foster interest in the CSU RERP program for photovoltaic panels. Since 2005, two homes in Manitou Springs have installed solar PV systems. We hope to encourage three additional households to do so by 2010.

CSU also offers rebates for home efficiency such as rebates on efficient clothes washers, furnaces, insulation, windows, etc. We will promote participation in these programs as well.

Outreach and Education through Farmers' Market

The Residential Committee will distribute the Checklist/Pledge, sell recycled bags for the high school student recycling group, and educate the public about participating in the carbon emission reduction goal through a booth at each of the 12 Midweek Farmers' Markets.

2008 Fall Climate and Energy Fair

We will help coordinate and participate in the second annual Climate and Energy Fair for the citizens of Manitou Springs.

Public Art Representing Goal

The Committee will partner with local artists to develop a city council approved object that can be publicly displayed on city property and will reflect the CO₂ savings done to date as juxtaposed to the overall 10% city-wide reduction goal. Funds will be raised to develop and place the winning design in a public area to encourage the residents to continue in their efforts.

Energy Reduction Contest

We will develop a protocol, flier, and handout for this contest. There may be both a business and residential category to see who has reduced their electrical and natural gas consumption the most over a year period. Prizes will be solicited from Manitou Springs businesses.

BUSINESS AND ECONOMIC DEVELOPMENT

The primary goal of the Business and Economic Development team is to work with the business community of Manitou Springs to develop a cost effective plan that allows businesses to upgrade older, less efficient T-12 fluorescent light fixtures to the more efficient T-8 light fixtures.

Reasons to focus on lighting

- Newer lighting technologies are approximately 40 percent more efficient;
- In many cases, an electronic ballast and new T-8 fluorescent tubes can be easily installed into older fixtures, avoiding the costs of replacing the entire fixture;
- Colorado Springs Utilities has an ongoing Business Rebate Program that will offset a portion of the retrofit cost. They have also offered technical assistance for this program;
- If enough businesses support the effort, we may be able to purchase components in large enough quantities to achieve a discount on the total cost;
- We can recommend the replacement of any incandescent light bulbs we come across with Compact Fluorescent light bulbs;
- We might get a big box retailer to donate a number of CFL bulbs or offer them at reduced prices.

Action Steps:

- 1) Identify a small number of businesses and pilot a data gathering and education process.
- 2) Email an introductory message going over the goal of the program and inviting interested businesses to contact us.
- 3) Visit interested businesses to inventory their current lighting and assess where upgrades could be made. Explain incentive to business owners:
 - Lower energy use = lower costs = lower emission of CO₂
 - Possibly distribute a flyer with facts and science on climate change and an explanation of how our electricity is produced

- 4) Customize a proposal for each business which estimates the cost of retrofitting old fixtures with new ballasts and tubes, the simple payback period, the amount of energy and money the upgrade could save, and the CO₂ emissions reduction.
- 5) Highlight Colorado Springs Utilities' current business rebate program and any discounts we can achieve by grouping a number of smaller purchases into one large order.
- 6) Additional factors that will impact the cost of a lighting upgrade are:
 - Cost of hiring someone to do the retrofit
 - Cost of disposal of old ballasts and tubes

Recognize those businesses that step up and agree to participate in the program as well as the volunteers who do the work.

WASTE REDUCTION AND RECYCLING

Goal: Franchise agreement(s) for trash hauling

In order to reduce the strain on city roads, increase local air quality, and establish comprehensive, city-wide curbside recycling, the primary goal of the Waste Reduction and Recycling Team is to establish a single trash collector per geographic region. This plan will reduce greenhouse emissions by reducing garbage truck mileage and increasing recycling rates. The customer cost for collection is expected to be reduced.

Action steps:

- 1) Develop an RFP per each geographic area (ward or neighborhood) or entire city which incorporates curbside recycling, pay as you throw, and the accessibility of various streets.
- 2) Establish a Green Ribbon Panel to help city staff administer city-wide collection by private companies.

Goal: Reduce water use city-wide (reduce energy needed for water delivery and treatment)

Action steps:

- 1) Institute tiered rates for business and residential water use
- 2) Pump and use allotted amount of Fountain Creek water for gardens and parks
- 3) Quantification (when possible) of greenhouse gas reduction potential of action steps
- 4) Establish a time line for implementation, financing, and assigning responsibility

Goal: Increase use of recycled paper

Action Step:

- 1) City, EDC, and School District adopt policies to purchase post-consumer recycled paper and paper products

Goal: Re-establish and expand recycling center

Action Steps:

- 1) Work with a recycling company to establish a recycling center on city or School District 14 property one weekend each month
- 2) Include annual yard-waste collection for composting
- 3) Incorporate occasional collection of reusable items for community sale or trade
- 4) Educate public regarding days to use, what to throw, where Styrofoam can go, etc.

- 5) Monitor recycling site through volunteers to prevent dumping, keep site clean, and further education and outreach

TRANSPORTATION

- Work with Mountain Metropolitan Transit to promote use of the Manitou #3 bus route.
- Ensure bike racks are included in Manitou Springs Ahead downtown streetscape.
- Prioritize pedestrian walkway improvements along Manitou Avenue, where unsafe or no sidewalks currently exist.
- Establish a park and ride area for carpooling and transit use (see City goals).
- Reduce congestion and vehicle emissions by reinstating the Manitou trolley and charging for on-street parking and not charging for parking in lots.

EVENTS, EDUCATION, AND OUTREACH

- 1) Provide education, information, and community outreach on reducing greenhouse gas emissions and improving air quality in general and specifically for Manitou Springs.
- 2) Generate community involvement in Manitou Springs' Climate Protection Campaign to reduce emissions and pollution that causes global warming.

Action Steps:

- a. *Develop Website*
 - a) Utilize the City's existing website
 - b) Include information on Manitou Climate and Air Quality Committee and Climate Action Plan
- b. *Sponsor an annual fall event*
 - a) Objective 1: community awareness
 - General environmental issues that affect global warming
 - Local resources to increase energy efficiency and reduce emissions
 - b) Objective 2: community involvement
 - Manitou Springs citizens' role in climate protection campaign
 - Community forum to involve citizens in the climate action planning process
 - c) Informational booths and displays
 - d) Youth events
 - e) Speakers
- c. *Provide Ongoing Education and Awareness*
 - a) Screen Al Gore's "Inconvenient Truth" at the High School
 - b) Develop presentation to present to various groups
 - Churches
 - Rotary, American Legion
 - Youth groups

MANITOU HOUSEHOLD PLEDGE

Take the Manitou Climate and Air Quality Pledge!

In December 2007, the Manitou Springs City Council unanimously set the following goals for both municipal operations and the larger community:

- **10% reduction in greenhouse gas emissions from 2005 levels by 2010**
- **30% reduction by 2020, and**
- **All new buildings and developments carbon neutral - generating as much energy as they consume - by 2030.**

Everyone can take action to reduce greenhouse gas pollution. Just by being a little more careful about the way you use energy each day you can significantly reduce greenhouse gas emissions. Please post this checklist on your fridge and tackle a few changes at a time.

Around the House

Heating/Cooling:

- Insulate** your garage and attic
- Replace/clean furnace/AC filters** at least every other month when in use (keep a supply)
- Caulk/weather strip** windows & doors
- Lower (raise) thermostat** setting 2° F
- Invest in an **automated thermostat**
- Use a fan or **open a window** instead of A/C
- Install **insulated curtains** or blinds

Water Heater:

- Wrap water heater in an **insulated blanket**
- Set to 120° F

Miscellaneous:

- Install **low flow shower/faucet heads**
- Take **shorter showers**, take a shower instead of a bath
- Don't let the water run** while shaving or brushing your teeth
- Fix leaky** toilets and faucets
- Replace incandescent bulbs with **compact fluorescent bulbs**, they use 1/4 the electricity
- Open the curtains** instead of turning on lights
- Cook with lids** on at a lower heat. Use the minimum amount of water
- Microwave** when you can or use toaster oven to reheat small portions
- TURN THINGS OFF WHEN NOT IN USE** (including lights & computers). Oh so easy!
- Unplug chargers & electronics** when not in use. Phantom loads account for up to 10% of electric use. To simplify, plug electronics into power strips and turn off switch when not in use
- Schedule a **home energy audit** from your utility company, they are usually free

Every kWh of electricity produces 1.7 lbs of CO2

Laundry:

- Wash **full loads** only
- Use **cold water** for wash and rinse cycle
- Clean dryer filter** after each load
- Don't overheat** clothes in dryer
- Install and **use a clothes line** or rack

Dish Washing:

- Run** the dishwasher **only when it's full**
- Turn off dishwasher after rinse, **air dry**
- Hand wash** in filled sink when time allows

Appliances:

- Vacuum refrigerator coils** every 6 months
- Purchase only **Energy Star®** appliances
- Consider replacing fridge** if >10 years old

Reduce, Reuse, Recycle

- Recycle** your paper, plastic & metal
- Buy used** instead of new items when possible
- Donate/sell** gently used, unwanted items
- Pay bills online** or use automatic deductions
- Reduce junk mail** to save trees and fuel; consider a service like www.greendimes.com
- Get stuff free.** Go to www.freecycle.org or www.craigslist.org to give/get free items locally
- Repair** instead of replace if salvageable
- Buy products with recycled materials**
- Pack **no waste** lunches
- Use **public library** instead of new books

Transportation

- Bike or walk** for short trips
- Use **public transit**
- Carpool** for work, kid activities, etc
- Share rides** with friends
- Work from home** if possible
- Keep your car maintained**, tune-up can improve gas mileage 4%; replacing clogged air filter 10%; and properly inflated tires 3%
- Don't let your car idle.** Idling for 30 seconds wastes more fuel than restarting your car and is harder on your engine
- Remove a roof rack** when not in use. This can improve fuel economy by 5%
- Clean out excess weight from trunk**
- Check **tire air pressure** monthly
- Buy a **fuel efficient car**
- Don't speed.** Accelerate/Brake smoothly.
- Consolidate trips**

Every gallon of gasoline burned produces 19.4 lbs of CO

At The Store

- Don't use disposable cups**, bring your own mug
- Recycle plastic grocery bags** and **avoid their use** if possible. Bring **reusable bags**
- Buy reusable bottles** and use tap water (filtered if you like) instead of buying bottled water
- Buy locally** grown, raised and produced goods to reduce the need for trucking
- Reduce your consumption of meat.** The meat industry produces 18% of CO2 emissions
- Avoid **excessive packaging.** Send emails to offenders. Say no to individually wrapped
- Say **no to Styrofoam**
- Avoid eco-unfriendly dry cleaning**
- Avoid fast food**
- Buy in bulk** and bring your own container

Other Ways to Help

- Plant a tree** (or 2 or 3 or more)
- Start a **compost** pile
- Buy **fewer things made of plastic**
- Take the **stairs** instead of the elevator
- Use rakes, brooms, push mowers** for yard
- Reduce Christmas/birthday party waste**
- Write a letter** to the editor/elected official
- Share** this list with a friend

-----Manitou's

Climate and Air Quality Action Pledge

Our household wants to be part of Manitou's goal of reducing greenhouse gas emissions 10% by 2010. Pick a few simple goals to work on at a time. Everything helps!

Here are some ways I will help:

- √ _____
- √ _____
- √ _____

Signature _____ Date _____

Email _____