

TOWN OF DAYTON

VML GREEN GOVERNMENT CHALLENGE

TOTAL POINTS SCORED: 145

ACTION ITEM	ACHIEVEMENTS	POINTS SCORED
#1 - Formal adoption of a sustainability plan, climate protection resolution, or similar commitment by the governing body.	Dayton Town Council formally adopted a resolution: <i>“Environmental Sustainability Commitment”</i> on August 11, 2008.	10
#2 - Create an Energy Improvement Plan.	Created the <i>“Town of Dayton Energy and Environmental Management Plan.”</i> This Plan outlines assessments and initiatives for energy and environmental improvements for our town.	10
#3 - Register with the EPA’s Energy Star Challenge and use their tools, or an equivalent system, to conduct a baseline emissions inventory of your government facilities.	Town registered with the EPA’s Energy Star Challenge and became a partner. Conducted a baseline emissions inventory of all town facilities and street lights; and created a program to track emissions, energy consumption, costs assessments, and percentages of energy consumption by sector.	10
#4 - Conduct an energy audit of two or more of your government facilities and implement at least one recommendation.	Conducted an independent energy audit of two town facilities and implemented a recommended improvement, which was to replace old, inefficient lighting in a town maintenance shop.	5
#7 - Develop a policy to utilize energy efficient and dark sky compliant outdoor light fixtures.	Town implemented a policy to utilize energy efficient and dark sky compliant outdoor light fixtures in an effort to help protect our ecosystem from the effects of excessive artificial lighting at night that interferes with nocturnal wildlife; help to conserve energy; reduce annoyance for residents; and improve night driving conditions by reducing glare. Dark sky fixtures are installed at some Town facilities.	5
#8 - Establish an energy manager position/responsibility or management team within the government.	Established an <i>Energy and Environmental Management Team</i> . This team is responsible for assessing energy deficiencies in town operations and facilities, and implementing improvements to reduce environmental impact and increase operating efficiency.	5

ACTION ITEM	ACHIEVEMENTS	POINTS SCORED
#11 - Implement an internal government program that reduces, reuses, and recycles paper, plastics and other materials.	Town staff has been participating in recycling for over 15 years; however, we have implemented initiatives to encourage employees to <i>reduce, reuse and recycle</i> (i.e. reduce waste by sharing office equipment (printers, copiers, shredders, etc.); purchasing multi-purpose and remanufactured products; reuse paper by using the backs for scratch paper; increase recycling of paper, plastics, glass, aluminum, metal, ink/toner cartridges, old computers and other equipment; added extra containers in facilities to make recycling more convenient.	5
#12 - Establish a procurement policy of a minimum of 30% post-consumer recycled content for everyday office paper use (consistent with the current federal government policy).	Town established a procurement policy where the purchase of all everyday office paper must have a minimum of 30% post-consumer recycled content.	5
#13 - Establish a community-wide recycling collection program.	Town implemented a curbside recycling program over 15 years ago; and it is estimated that 90% of town residents and small businesses participate in recycling. Recyclable items include PETE #1 & HPDE #2 plastics, glass (clear, green, brown), aluminum and bi-metal cans, paper products (newspaper, inserts, magazines, etc.).	5
#14 - Adopt a “Green Fleet” policy that incorporates, at a minimum, the purchase of low emitting fuel-efficient vehicles for vehicle fleet replacement and the use of alternative fuels (biodiesel, natural gas, ethanol) in fleet operations.	Town adopted a “Green Fleet” policy that includes the purchase of low emitting fuel-efficient vehicles and/or alternative fueled vehicles for fleet replacements or additions. The town is exploring the feasibility of converting existing public works vehicles to biodiesel.	10
#16 - Adopt land-use plans that allow higher-density development either near public transit nodes or in areas with existing infrastructure AND encourage mixed-use communities.	The Land Use Plan section of the Town’s Comprehensive Plan (updated in 2007) incorporates these initiatives.	5
#18 - Adopt a land use or development tool that preserves open space, farmland and forests such as Purchase of Development Rights (PDRs) or Transfer of Development Rights.	Town Council adopted an ordinance in 2003 under <i>Real Estate Taxation, Land Use Assessment</i> , to allow real estate tax relief for real estate devoted to agricultural, horticultural, forest or open-space uses.	5

ACTION ITEM	ACHIEVEMENTS	POINTS SCORED
#19 - Develop and implement a plan for tree preservation and planting.	Town Council adopted a Tree Canopies ordinance in 2000 that mandates tree preservation and planting.	5
#21 - Adopt an anti-idling policy for school/government fleet vehicles.	Implemented an anti-idling policy for town fleet vehicles.	5
#22 - Provide employee benefits for ride sharing, walking, biking, or taking transit to work.	Provide employee incentives for ride sharing, walking, and biking to and from work. Another incentive is provided for employees not using any form of motorized transportation for lunchtime/mealtime breaks.	5
#23 - Adopt a policy that a minimum of 20% of the eligible workforce should participate in alternative work schedules or telework by 2010 (consistent with the current VA State policy).	Town has implemented an optional alternative work schedule. Currently 60 – 70% of employees are working a 10-hour per day (four days per week) schedule; however, the majority of police officers have been working 12-hour shifts (three – four days per week) for over 10 years. This has not only helped conserve energy by reducing the number of days employees are commuting to work, going out to lunch, “powering-up” computers and other equipment, office lighting, etc.; but has also made it possible to extend business hours in the Treasurer’s Office for town customers.	5
#24 – Develop an employee education program on policies/practices relating to the environment and energy conservation.	Developed an employee educational program on energy efficiency and environmental protection (i.e. handouts, videos, presentations, etc.). Employees received a copy of the Town’s Energy and Environmental Management Plan with a “summary” of items listed in the Plan outlining initiatives for energy conservation that are relative to the employee (electronically to those with access). Also, a representative from Cargill, Inc. has offered to share ideas and make a presentation to town officials and staff on environmental sustainability.	5
#25 – Establish an advisory commission composed of local residents and business representatives to advise and assist the local governing board on policies and practices dealing with the environment and energy conservation.	Established a Dayton Citizens Advisory Committee to explore new ideas; gather feedback from the community; evaluate community priorities; and offer suggestions and ideas to the Town’s Energy and Environmental Management Team regarding environmental sustainability.	5

ACTION ITEM	ACHIEVEMENTS	POINTS SCORED
#26 - Develop and implement an education program for the local community dealing with the environment and energy conservation.	The Town established a “Go Green Dayton” committee to promote community awareness, education, responsibility and support of environmental sustainability; and to encourage the involvement of local citizens, businesses and non-profit organizations.	5
#27 - Establish a Safe Routes to School program, which encourages walking and bicycling to neighborhood schools.	<p>Although the streets and sidewalks in town are owned by VDOT, the Town has been persistent in seeking grant funding to assist with sidewalk improvements and additions to provide safe routes for students to walk to school, as well as other pedestrian traffic. In 2006, the Town was awarded a TEA-21 Enhancement Grant from VDOT in the amount of \$175,000, to install sidewalks and bike paths in town.</p> <p>In addition, the Town promoted <i>National Walk to School Day (October 8th)</i>, by including an article in the town’s newsletter and on the website inviting students to take part in this national program. The Dayton Police Department added extra patrol officers to provide additional security for children while walking to and from school. The “Go Green Dayton” committee discussed putting more emphasis on this event next year.</p>	5
#30 – Innovations (maximum of 25 points available):	<ul style="list-style-type: none"> • Being a small town, a large number of residents drop their utility payments off at the Municipal Building (on their way to or from work, or other destinations) via the drive-thru, at the counter or deposit box. Town utility bills are designed to be printed on one “postcard size” bill, and mailed out as postcards (not in envelopes—also lower postage cost), with a detachable portion for submittal (no return envelope as well). Customers are encouraged by newsletter, and other means to recycle old envelopes from junk mail (which are recycled again by town staff) to contain their pay stub and payment when dropping off payments. However, we do mail around 8-10 bills per month in envelopes to customers with multiple accounts, but no return envelopes are included. This saves a tremendous amount of paper and postage. 	25

Innovations (continued):

- In an effort to get our youth involved in energy efficiency and environmental protection, the town is currently sponsoring a “Go Green Dayton Contest” for local students (K-12 or home-schooled), to submit an innovative idea (written, drawing, model or display) on how the average household can go green or greener. A prize (two tickets to the local water park) will be awarded to the winner of each age group, with a grand prize (new bike and helmet) to the overall winner. Massanutten Water Park donated four tickets, and the bike and helmet are being donated by Walmart.
- The town sponsors an Annual Cooks Creek Cleanup Day where town personnel and volunteers remove trash and debris from the creek. During the past two years, three dump truck loads of debris were removed from the creek. Cooks Creek is in the Chesapeake Bay watershed.
- Implemented a policy whereby only earth friendly products are used at all town parks. Also, the town properly disposed of and eliminated the use of all “controlled” pesticides and herbicides, and also implemented a policy that only earth friendly products will be used in other areas of the town, unless there is an absolute need to use stronger “over-the-counter” products (i.e. Round-up, Sevin and insect spray), for spot control only for specific instances.
- The town has an Inoperable/Junk Vehicle Ordinance, which prohibits these vehicles from being parked or stored on any residential, commercial or agricultural district town longer than 60 days, unless garaged or screened from view. This reduces hazardous chemicals leaching from these vehicles into storm water runoff.
- Town recently performed an extensive inventory of all hazardous chemicals, and properly disposed of all chemicals that were old and no longer used; and imposed a policy to only purchase chemicals that are needed for immediate use or in the near future. The town built two chemical storage rooms at the water plant (site of the most hazardous chemicals used by the town), and also purchased three additional OSHA approved chemical storage cabinets in town maintenance shops. (Note: Dayton Ruritan Club awarded the town a matching environmental grant in the amount of \$500, which we used towards the purchase of these chemical

<p>Innovations (continued):</p>	<p>storage cabinets.)</p> <ul style="list-style-type: none"> • Vacuumed leaves collected at curbside by the Town Public Works Department are taken to local farmers to be used for agricultural purposes. Also, Christmas trees are taken to the Turner Ashby High School Agricultural Department to be placed in streams for aquatic habitat. • The town plans to install a bike rack at the Municipal Building, and is researching the possibility of installing another in the downtown area (near post office and bank). • Incentive awards can be earned by employees for submitting an energy saving or environmentally friendly idea not listed in the Town’s Energy and Environmental Management Plan, that proves to be functional in town operations. This encourages employees to read the Plan and consider ways to conserve energy. • Encourage residents to sign up to receive town newsletters, flyers of upcoming events, and other information electronically. Town newsletter and information on events are also listed on town’s website. 	
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How does the Town plan to spend the award money?

The town hasn’t made a final decision on how to spend the award money, but it will be used for something related to environmental sustainability. Some of the ideas we’ve discussed for using the money are: apply it to the cost of replacing the inefficient light fixtures in a town maintenance shop; purchase bike racks; and use it to help with the cost of converting town vehicles to biodiesel or other alternative fuel.

Comments:

We are grateful to VML and Moseley Architects for sponsoring this contest. It really motivated our town to implement new policies and improvements to reduce carbon emissions and protect our natural resources. The challenge also helped us realize the importance of implementing a local “Go Green” campaign, to promote awareness and education; and to encourage our community to become involved as well. While investing in energy efficiency measures, we not only help to save the earth’s environment—we also save financially in operating costs. The more we all contribute now, the greater the rewards for generations to come. The Town of Dayton is committed to environmental sustainability, and joins the efforts of other communities, businesses and individuals around the world, by sharing responsibility on behalf of this very important mission. *TOGETHER, WE CAN MAKE A DIFFERENCE!*

The Town of Dayton would like to thank the following contributors to our “Go Green Dayton” Campaign:

- ❖ Walmart (Rt. 42)
- ❖ Dayton Ruritan Club
- ❖ Dean Brothers, Inc.
- ❖ Massanutten Water Park
- ❖ Dominion Power
- ❖ Shenandoah Valley Electric Cooperative
- ❖ Cargill, Inc.
- ❖ Energy Star

“Go Green Dayton” Campaign:

On September 24th, 2008, the town hosted a reception to kickoff the “Go Green Dayton” campaign, and included the following energy saving initiatives, materials and gifts to promote community awareness and education:

- Town residents (adults and children) were encouraged to sign a pledge to make a lifelong commitment to reduce their carbon emissions, recycle, conserve water, and protect the environment. A “Go Green Dayton” magnet was given to hang the commitment on their refrigerator as a daily reminder of their pledge.
- Compact Fluorescent Bulbs (4-pack, 60 watt) – each household
- Large “Go Green Dayton” and medium “Walmart” reusable shopping totes (Walmart donated 100 medium totes)
- “Go Green Dayton” reusable water bottles
- “Go Green Dayton” promotional ink pens
- Energy saving informational materials for adults and children from Energy Star, Dominion Power and Shenandoah Valley Electric Cooperative.
- Earth key chains and earth punch balls, environmental activity books and crayons for children
- An electrical presentation showing how much CFLs save energy in comparison to incandescent bulbs, and a display of various types of energy efficient lighting.
- Displays on energy saving tips and promoting “National Change a Light Day”
- Door prizes (adults and children) related to energy conservation: water filter for faucet—to drink tap water instead of bottled water; throws—to keep warm instead of turning up the heat; clothes drying racks—instead of using the electric dryer; insulated lunch bags—instead of going out to lunch; additional CFL bulbs (donated by Dean Brothers, Inc. and Shenandoah Valley Electric Cooperative); and Going Green Books for children.
- Promoted a contest for school-age children from local schools (or home-schooled children) to submit an innovative and original idea on how the average household can go green or greener (written format, drawing, video, model or display). Prizes awarded to winners (two tickets to Massanutten Water Park for each age group, and a bike with helmet for the grand prize winner). Massanutten Water Park donated four tickets and Walmart is donating the bike and helmet.

Below are photos of some of the displays used for public awareness and education:



ENERGY STAR

Look for the ENERGY STAR label when purchasing heating and cooling units, appliances, electronics, fixtures, and other products.

The Environmental Protection Agency and the Department of Energy assure that ENERGY STAR qualified products meet strict efficiency guidelines.

HOME HEATING & COOLING

- Grab a sweater or open a window. Turn your thermostat up a few degrees in the summer and down a few degrees in the winter. Just one or two degrees can make an impact on carbon emissions.
- Install a programmable thermostat compatible with your system.
- Clean or replace air filters as recommended for heating & cooling systems or they'll run more inefficiently.
- Insulate your walls and ceilings. This can save 20-30% of home heating bills.
- Winterize your home or apartment, using caulk and weather stripping to plug air leaks around doors and windows.
- Check for leaks or loose seals in ductwork. This can account for as much as 20% in lost energy.
- Keep fireplace dampers and glass fireplace doors closed when not in use.

LAUNDRY TIPS

- Consider your clothes as energy waste. Use a cold or warm-water wash setting, and wash warmer clothes, including towels, hot for warm water and cold for cold water.
- Hang your clothes outside to dry or use a drying rack made from painted wood. Don't use a dryer unless you really need to. When you do, use the eco mode.
- Check the door and window seals on your washer. The door gasket may be worn and leaking water. The window gasket may be worn and leaking water. Check the door and window seals for leaks. If you find a leak, replace the seal.
- Dry your clothes on a rack or line. If you must use a dryer, use the eco mode.
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KILL THE ENERGY VAMPIRES

TVs, video and DVD players, cable boxes, chargers for cell phones, laptops, cameras, household devices, and other electronic equipment are sucking huge amounts of power from the wall. In the average home, 75% of the power bills are caused by these "energy vampires." Plug them into a power strip and unplug them when they're not in use.

GO GREEN DAYTON!

REDUCE, REUSE & RECYCLE

The manufacturing process produces an average of four to eight pounds of CO2 for every pound of manufactured product. You'll save 2,400 pounds of CO2 per year by recycling half of your household waste.

Participate in the town's curbside recycling program provided to local residents. If you need a recycling bin, contact the Public Works Department.

DRINK TAP WATER

Think that bottled water is better for you than tap water? Recent studies suggest that it's no safer, no purer, and contains no less bacteria than good old tap water. Bottled water does, however, pose an environmental concern. It's estimated that 30 billion bottles of water are consumed every year, and only one out of five of those bottles are recycled; not to mention the resources involved in bottling and shipping the water.

ENERGY SAVING TIPS

- Replace incandescent (regular) bulbs with CFLs, starting with the most frequently used lights.
- Use reusable shopping bags.
- Use the Energy Saver setting on your refrigerator. Check to make sure it's set to the correct temperature by using a thermometer. Fresh Food Section: 37°-40° F, Freezer Section: 0°-5° F.
- Insulate your hot water heater tank and piping (careful not to cover the thermostat). Lower the temperature to 130° F.
- Air dry clothes instead of using the "heated dry" setting on your clothes dryer.
- Turn off the lights when you don't need them. Use task lighting instead of lighting the entire room. Make use of natural light.
- Close blinds during summer months to keep out the sun's rays, and open them to let winter sun come in.
- Turn off your computer monitor when not in use.
- While washing, use properly fitted lids to hold in the heat. Use the right size pot for the size of the burner.
- Don't let the water run while brushing your teeth or shaving.
- Use environmental friendly products for cleaning instead of harsh chemicals. Dispose of hazardous chemicals properly.
- Plant a tree to offset your CO2.

There are lots of other ways we can conserve energy and protect our natural resources; most things don't even cost anything. In fact, you'll save money. All the small things add up and can really make a difference.

DRIVING & AUTO MAINTENANCE

- Drive sensibly. Speeding and rapid acceleration wastes gasoline.
- Use the cruise control whenever possible.
- Remove unnecessary weight from your vehicle.
- Avoid engine idling. Thirty seconds is all that's needed to warm up your vehicle.
- Tune up the engine.
- Keep tires properly inflated and aligned.
- Replace dirty air filters.
- Avoid using the air conditioner.
- When buying a new/replacement vehicle, consider one that's more fuel-efficient or uses alternative energy.

LEAVE YOUR CAR IN THE DRIVEWAY

Hop on your bike, put on your walking shoes, car pool, and use public transportation. Avoiding your car whenever possible will lessen your carbon footprint.

BUY LOCALLY GROWN FOOD

Buying locally produced food supports neighboring farmers, eliminates much of the pollution associated with transporting food, and supports a more sustainable model of agricultural consumption.

SAVE WATER

- Choose ENERGY STAR-rated clothes washers and dishwashers.
- Install low-flow commodes, toilets, and showerheads.
- Take short showers instead of baths.
- Repair water leaks promptly.
- Choose drought-resistant and perennial plants to reduce the need for watering.
- Instead of watering your lawn and garden with your hose, use a watering can or a long-handled watering wand. They're more efficient than the use of your hose. They're also safer.



NATIONAL CHANGE A LIGHT DAY FRIDAY, OCTOBER 3



HOW TO CHOOSE THE RIGHT LIGHT

- Look first for the government's ENERGY STAR label.
- Match the right CFL type to the right kind of fixture to help ensure that it will perform properly and last longer. Read the packaging to be sure that the type you choose works for the fixture you have in mind. For example:
 - if a light fixture is connected to a dimmer or three-way switch, select CFLs that are labeled for this use.
 - For recessed fixtures, it is better to use a reflector CFL instead of a standard type.
- To get the ENERGY STAR qualified right size of fixture with the right amount of light, choose one that offers the same lumen rating as the type you are replacing. The higher the lumen rating, the greater the light output.
- Choose the color that works best for you. For example, warm white CFLs are most similar to the color of incandescent bulbs. For task lighting (such as food preparation), you may prefer a cooler color.

ARE CFLs SAFE?

ENERGY STAR qualified CFLs consistently meet US Safety Standards, which require the materials to be well-insulating and non-flammable. The base on older lighting may contain mercury. ENERGY STAR qualified CFLs do not contain mercury. CFL manufacturers receive credit for the mercury and materials that they use in their products. In fact, the amount of mercury in a CFL is less than the amount of mercury in a standard incandescent bulb. CFLs are safe to use in your home. They are safe to touch, and they are safe to break. If you break a CFL, you should follow the instructions on the packaging to clean up the broken bulb.

A CFL (Compact Fluorescent Lamp) can burn 13 times longer than a traditional incandescent bulb and uses about 80% less energy.



If every American household replaced just one light bulb or fixture with an ENERGY STAR, every year, we would save enough energy to light more than 3,000,000 homes, more than \$600,000,000 in energy costs, and prevent greenhouse gasses equivalent to the emissions of more than 800,000 cars!



CFL RECYCLING

Make certain to recycle your CFLs once they burn out. CFLs contain small amounts of mercury, which can pose an environmental threat, if they are not disposed of properly. Home Depot stores will accept any CFL at their service desk to be recycled.

DID YOU KNOW?

Lighting accounts for about 20% of the average home's electric bills. By replacing your five (5) most frequently used light fixtures or the bulbs in them with ENERGY STAR qualified options, you can save more than \$65 each year in energy costs!