

**Supporting Documents 2006 DOI Environmental Achievement Award Nomination  
Northeast Regional Office Green Team Environmental Management System**

- Article: Hampshire Gazette, Northampton, MA August 5, 2005
- Article: Hampshire Gazette, Northampton, MA November 7, 2005
- Case Study: Attachment to Director's memo December 22, 2005
- Environmental Policy Section: Environmental Management System Plan, Northeast Regional Office U.S. Fish and Wildlife Service (on reverse of above document)
- Report: Universal Electric Company Lighting and Energy Efficiency Program Prepared for Amherst Development Assoc. 300 Westgate Center Dr., Hadley, MA
- EPA webpage: Emissions Calculator
- PowerPoint scrolling shows: shown at Northeast Regional Office all-employee meetings March-December, 2005



Members of The Northeast Fish and Wildlife Service Regional Office Green Team and the first recipient of the office's *Greening the Service through Environmental Leadership Award*, Building Manager Jeff Parsons. From left to right, David Washburn, Dee Mazzarese, Pam Rooney, Will Waldron, Jeff Parsons, Liz Dawson, Catherine Hibbard, Willa Nehlsen, and Bob Hillis. The award was made from recycled window pane glass.

YOUR GAZETTENET SUBSCRIPTION

LogIn/Subscribe : Account Center : [Forgot/change password](#) : [Login problems](#) : [FAQs](#)



## 'Green teams' move to trim power, Valley companies work to conserve electricity

BY TOM MARSHALL AND Z. BEN FEDER STAFF WRITERS

EMAIL THIS WRITER MORE STORIES BY THIS WRITER

[ Originally published on: Friday, August 05, 2005 ]

One day last week, New England's energy use reached an all-time high, causing energy providers to request area businesses find ways to reduce their power use.

But some businesses have already been seeking ways to conserve electricity without prompting by the energy utilities.

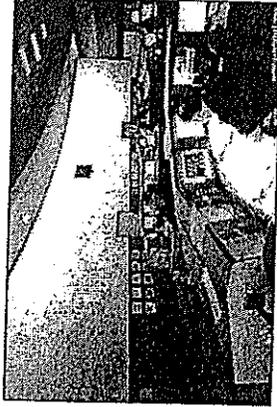
ISO New England Inc., the operator of the region's bulk power system and wholesale electricity markets, estimated the electricity use reached 26,922 megawatts on July 28, surpassing the previously established record of 26,749 megawatts set on July 19. One megawatt can serve 1,000 homes.

Due to high temperatures, energy demand peaked in July and ISO New England officials applied emergency operating procedures.

To reduce energy strains on the power grid, ISO New England called upon the customers enrolled in emergency energy resources programs to either interrupt their energy use or reduce it voluntarily.

Seven hundred organizations are enrolled in the two programs, which compensate businesses that are required to shut off power during an emergency or find ways to conserve.

The programs 'are critical in our marketplace in New England (and) our efforts have been done to design grid reliability,' said company spokeswoman Ellen Foley during a phone interview Thursday.



KEVIN GUTTING

Employees of ISO New England Inc. in Holyoke, operator of the region's bulk power system, manage the grid in June 2001.

[Enlarge photo](#) | [Buy photos](#)

New England's energy use has grown by 6 percent since 2002, Foley said. 'That's a big jump in demand.'

Company officials are expecting demand to increase by 1.5 to 2.5 percent a year.

#### 'Green Teams' in place

Smith College in Northampton is part of the voluntary energy-reduction group and was asked by ISO New England to reduce its electricity use wherever possible.

The college has assembled a 'Green Team' to undertake the efforts of energy conservation. The group plans to replace 240 75-watt light bulbs in a residence hall with 15-watt compact fluorescent bulbs.

The \$3,500 project is expected to save \$5,000 a year in energy costs.

The college's Green Team is also planning a project to begin by the fall of 2006 that will work to eliminate more than 16,500 tons of greenhouse gas emissions per year produced by the college.

At the U.S. Fish and Wildlife Service off Route 9 in Hadley, officials said their building had not received any specific conservation requests to limit power use, but is following an agency-wide order to 'green up.'

Catherine Hibbard, leader of the building's own 'Green Team,' said the agency is planning to install new equipment, including motion detectors, more efficient lights, and possibly on-demand water heaters.

Such changes, which were recommended in an optional energy audit by the building's power contractor, Universal Electric Corp., could save \$10,000 annually in power costs, said spokeswoman Diana Weaver.

Jason Burbank, campus energy engineer at the University of Massachusetts, said the physical plant department has not yet received requests this summer to curtail its electricity use, though it has in the past. Such calls come when the regional power grid reaches warning levels, usually when peak use coincides with malfunctions at power-generating facilities.

Burbank could not recall such an event either this summer or last year.

'A little bit of pain and suffering at that point is reasonable,' Burbank added. 'To

keep the grid going.'

Ray Jackson, assistant director for utilities in the physical plant department, said the Amherst campus spent around \$7.2 million last year on electricity and has just launched a 10-year effort to reduce all of its energy consumption by 25 percent.

'Electricity is lagging behind,' he said. 'Water conservation is doing really well, heating for steam is doing really well.'

The conservation effort, which involves \$42 million in equipment improvements across the campus, is expected to pay for itself in energy savings, Jackson said.

At Mount Holyoke College in South Hadley, it has been five or six years since the institution was asked to cut back its power use by the South Hadley Electric Light Department, said John Bryant, director of facilities management.

In that time, the college has been modernizing its physical plant to save on soaring energy costs and to respond to campus demands for conservation, he said.

More buildings at Mount Holyoke have air conditioning than in decades past, but there are also more efficient windows, lights and a new chilled-water plant to increase efficiency.

'Our usage is actually down about 5 percent this year,' Bryant said, estimating the college's annual electric bill at around \$1.3 million.

This summer, Mount Holyoke's physical plant department has run a voluntary 'load-shedding' program on hot days - turning off air conditioning and lights for short periods around campus and asking departments to choose their low-use times, while maintaining power for computers and other needs.

'If you were really paying attention it might be noticeable,' Bryant said, referring to the slightly warmer indoor temperatures on those days. 'But we try to move it around so it doesn't have an impact.'

Mindful of costs

Easthampton Savings Bank President William Hogan Jr. said the company, which includes seven bank offices in Hampshire County, has a general energy conservation program, which keeps employees aware of electricity costs.

... .. many companies work to conserve electricity

'From a strategic standpoint, we are mindful of energy costs - it gets everyone's attention,' Hogan said.

Michael Superson, part owner of Big E's Foodland on Union Street in Easthampton, said he is tough on monitoring energy use, but said the grocery store 'doesn't do anything out of the ordinary.'

Superson said he makes sure every light is off in the store when it closes. Every spring, the store's roof-top air compressors - which run air conditioners and freezers - are cleaned so they run efficiently during the summer.

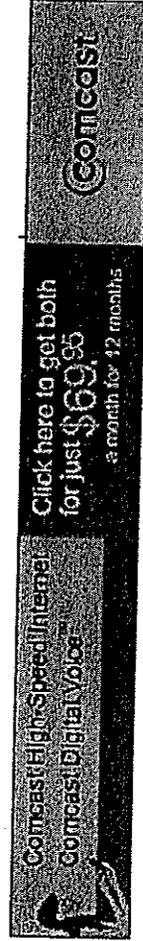
Recently a lighting consultant working in conjunction with the Western Massachusetts Electric Co. visited Superson's store to conduct an energy audit.

According to Superson, the purpose of the consultant's visit was to see if they could install more efficient lighting fixtures to cut back on the number of bulbs the store uses.

'In this industry, we're really into energy savings,' said Superson.

David Viola, operations manager at the Hampshire Mall in Hadley, said the mall's original, vintage-1978 building management system monitors temperatures and automatically turns the air conditioning down a bit, when the system strains.

'It sees that we're drawing a lot of power because the units are running and running and running,' he said. 'It's antiquated, but it does what it's supposed to do.'



Comcast High-Speed Internet  
Comcast Digital Voice

Click here to get both  
for just \$69.95  
a month for 12 months

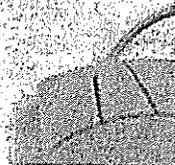


Copyright © 2005 GazetteNET.com v.6 / Daily Hampshire Gazette  
[Copyright Notice](#) | [Privacy Policy](#) | [Terms of Use](#)

## YOUR GAZETTENET SUBSCRIPTION

[Login/Subscribe](#) : [Account Center](#) : [Forgot/change password](#) : [Login problems](#) : [FAQs](#)

**gazettenet**  
DAILY HAMPSHIRE  
GAZETTE



## New projects adopt 'green' construction

BY NICK GRABBE STAFF WRITER

[EMAIL THIS WRITER](#) [MORE STORIES BY THIS WRITER](#)

[ Originally published on: Monday, November 07, 2005 ]

**AMHERST** - When the Amherst Cinema building reopens next spring, there will be solar panels on its roof to provide electricity to the second-floor offices.

It's one example of the ways businesses and institutions are responding to increasing energy prices. Many are investing in renewable energy systems, to save money and to conserve oil and electricity.

The architectural firm of Kuhn, Riddle is planning several energy-saving measures for its new offices at the Amherst Cinema building. The 20 solar or "photovoltaic" panels, each of them 3 by 6 feet, will generate about 10 kilowatts of electricity in full sun, said co-owner Christopher Riddle.

He estimates that the system will cost \$25,000, and will pay for itself in reduced electricity bills in 30 years. This is a longer "payback" period than with most energy conservation measures, but Riddle's goal is broader than just cost savings.

"This term 'payback' is a concept that you don't use in other realms, such as you don't ask the payback when purchasing a sound system or a golden retriever," he said. "You decide you want one and go out and get it. We should get to the point where we want a sustainable planet, and go out and get it."

A group is seeking to raise money for a new movie theater behind the Amherst Cinema building. Riddle is talking to the group about investing in a similar solar system to produce the electricity to project the movies and provide lighting, he said.

In addition, the new Kuhn, Riddle office will have more insulation than required by the building code, and glass walls on three sides will let sunlight in, he said. There will be controls on the electric lighting so that it automatically dims when the sun comes up, and this system has a "payback" period of only five years, he said.

Many other local institutions are investing in energy conservation and renewable energy:

• The U.S. Fish and Wildlife Service building in Hadley is about to undergo \$56,000 worth of improvements that will save that amount of money in electricity over three years, said building manager Jeff Parsons. The plan includes replacement of its four-bulb fluorescent lighting with two-bulb versions that include mirrors and reflectors to provide greater efficiency, he said.

• When Cooley Dickinson Hospital opens its new addition in about a year, it will have a second plant for burning wood chips so that all of its heat, hot water

and air-conditioning will come from renewable sources. The hospital is also looking at whether the plant can generate electricity from the steam that's a byproduct, and is planning for more efficient fluorescent lighting, said vice president Richard Corder.

◊ The Pioneer Valley Planning Commission started a two-year campaign in July to promote renewable energy in the region, said principal planner Catherine Miller. The effort features an inventory of renewable energy activities, and seeks to set a goal for regional conversion to the generation of power from the sun, wind, methane and biomass, she said. The commission is also seeking a grant for a local initiative to discourage motorists from idling their vehicles, she said.

**Manulife Financial Stock**

Free MFC news, information, analysis and commission-free trades

**Leominster Ma**

Select a City in Massachusetts Homes Starting at \$250,000

Ads by Google

Copyright © 2005 GazetteNET.com v.6 / Daily Hampshire Gazette  
[Copyright Notice](#) | [Privacy Policy](#) | [Terms of Use](#)



# United States Department of the Interior

FISH AND WILDLIFE SERVICE

DEC 22 2005

## Memorandum

To: Regional Directors, Regions 1-7  
Chief, Office of Law Enforcement  
Assistant Directors  
Director, National Conservation Training Center

From: **Acting** Director *Marshall D. Jones*

Subject: Energy and Fuel Conservation

The President signed a memorandum on September 26, 2005, directing Federal agencies to take immediate actions to conserve energy and fuel use throughout Federal facilities and the motor fleet in response to the impacts of Hurricanes Katrina and Rita (see Attachment 1). On October 21, 2005, the Secretary of the Interior strongly reinforced this directive (see Attachment 2). As such, it is important that the Service demonstrate leadership and further contribute to the relief effort by taking a number of steps that will reduce energy consumption. On October 25, 2005, the Deputy Director reported to the Director, Office of Acquisition and Property Management on the steps the Service will take to conserve energy and fuel (see Attachment 3).

Within two weeks after receipt of this memorandum, I urge all field stations and Regional Offices (with the assistance of the General Services Administration) to take action to reduce use of natural gas, electricity, gasoline, and diesel fuel to the maximum extent while carrying out the Service's mission. Many immediate actions are achievable at no cost such as shutting off unnecessary lighting. Every field station should contact their local utility or other energy service provider to obtain an energy audit, which is usually available at no cost. Please implement other appropriate Energy Conservation Measures (ECM's) as soon as possible. Both immediate energy reduction actions and ECM's are presented in Attachment 4. Many ECM's, such as replacing incandescent light bulbs with compact fluorescent lights, installing motion detector light switches and programmable thermostats, or some lighting retrofits, can be implemented at low cost and have very short payback periods.

Because of the President's focus on energy conservation, I am requesting that each Regional program immediately begin identifying energy reduction projects as we approach this winter. To ensure that work on such projects gets underway quickly, each Region is hereby directed to spend no less than \$50,000 in FY 2006 Resource Management funds for energy-related deferred maintenance and preventive maintenance at National Wildlife Refuges (Subactivity 1262). For National Fish Hatcheries, where feasible within appropriated Resource Management funding (Subactivity 1313A), please apply a focused portion of those funds towards logical ECM's, particularly those with measurable results. Projects should be installed or completed by April 30, 2006, if possible.

As directed by the President, we must conserve fuel by temporarily curtailing all non-essential travel and other activities that use gasoline or diesel fuel. We must take action to conserve natural gas and electricity during periods of peak consumption by shifting energy-intensive activities to non-peak periods whenever possible, and by continuing to procure and use efficient *Energy Star* appliances and products. All Service employees are encouraged to carpool or use public transportation, if available.

Some Regions may already be focusing existing deferred or preventive maintenance funding towards energy-related projects. We should be prepared to report these accomplishments to the Department next spring, as well as any new ECM's and initiatives that you undertake as a result of this directive.

Thank you in advance for your efforts.

Please call David Guthrie, Service Energy Coordinator, at (703) 358-2476, if you have questions.

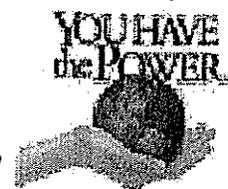
Attachments



**ENERGY and WATER CONSERVATION**

**Overview**

Although the Service is recognized as a Federal energy leader, we can do more to conserve energy and be good environmental stewards. While the conditions that created the energy shortages and rolling blackouts in California and other States in the summer of 2001 have abated, new challenges from the aftermath of Hurricanes Katrina and Rita have made it imperative that we work harder to reduce energy costs and free up funds for resource management projects.



On September 26, 2005, The President directed the Service to take immediate action to reduce consumption of natural gas, electricity, gasoline and diesel fuel use to the maximum extent in our facilities and the motor fleet while carrying out our mission. On October 21, 2005, the Secretary of the Interior reinforced this mandate.

It is imperative that America increase its energy independence... —Excerpt from the President's Statement (April 25, 2002)

All agencies should conserve fuel so we can reduce overall demand and allow extra supplies to be directed towards the hurricane relief effort. —Excerpt from the Presidential Memorandum (September 26, 2005)

The U. S. Department of Energy (DOE) expects that full recovery of production facilities and other infrastructure in the Gulf of Mexico region damaged by the two hurricanes will not occur before the end of the second quarter of 2006. Nationwide, natural gas heating costs are expected to be 41% more in winter 2006 than last winter. Electricity costs are

expected to be 33% higher. (ASHRAE Industry News, November 10, 2005 - Vol. 4, No. 45)

As such, implementing the immediate actions and longer-term Energy Conservation Measures (ECM's) presented in these guidelines will enable the Service to demonstrate leadership and further contribute to the hurricane relief effort by taking a number of steps that have the potential to reduce energy consumption. Many immediate actions are achievable at no cost such as shutting off unnecessary lighting or obtaining free energy audits. Many ECM's, such as replacing incandescent light bulbs with compact fluorescent lights, installing occupancy sensors and programmable thermostats, can be implemented at low cost and have very short payback periods. Please ensure that energy-related projects are included in SAMMS and are coded properly (i.e., Specialty Work Type Code = Energy).

The following document presents low or no-cost ways to save energy. The "Top Ten" energy conservation measures are presented in Appendix A. The Environmental Management System (EMS) approach to energy conservation is shown in Appendix B. Motor vehicle energy savings and fleet management are discussed in Appendix C.



## Fish and Wildlife Service Energy Check Sheet

Energy and Water Conservation  
December 22, 2005

### Take Immediate Action to Conserve Energy and Fuel

As directed by the President, we must be diligent to conserve fuel by taking immediate action. The myth that implementing energy efficiency measures is cost prohibitive is inaccurate. There are plenty of no-cost and low-cost measures that not only improve the bottom line and reduce energy consumption but also can be implemented quickly.

- ❖ Temporarily curtail all non-essential travel and other activities that use gasoline or diesel fuel. Is there a more energy-efficient way to conduct business? **Travel essential to carrying out the Service's mission should not be reduced.**
- ❖ Increase use of conference calls, email exchanges, and videoconferencing as alternatives to face-to-face meeting.
- ❖ Minimize the miles traveled/participant for conferences by holding them in central locations.
- ❖ Shift energy-intensive activities to non-peak periods whenever possible to conserve natural gas and electricity during periods of peak consumption.
  - Chill water at night off-peak if a chiller is used.
  - Attempt "peak shaving" by turning off chillers/air conditioners periodically during peak summer hours, in conjunction with an educational campaign.
  - Enter into agreements with power companies to enable them to turn off large electric water pumps by a radio controlled signal during peak power demand periods, which will result in significant reductions in the costs per kWh. **CASE STUDY:** This alternative has been demonstrated successfully at Trempealeau NWR, Wisconsin.
- ❖ Continue to purchase only computer equipment, appliances, and products that feature the ENERGY STAR<sup>®</sup> EnergyGuide label. *More information about ENERGY STAR<sup>®</sup> approved products is at [www.energystar.gov](http://www.energystar.gov)* NOTE: The Service purchases energy-efficient appliances (especially microwave ovens and refrigerators) for its offices and promotes purchase of energy-efficient items on the GSA schedule and through the Javits Wagner O'Day (JWOD) Program, which aggressively incorporate energy-efficient items into their product lines. (The JWOD Program provides employment opportunities for thousands of people with severe disabilities to earn good wages and move to greater independence.) See [www.gsaadvantage.gov](http://www.gsaadvantage.gov) or [www.jwod.gov](http://www.jwod.gov)
- ❖ Contact your local electric and natural gas utility or other energy service provider and request an energy audit, often available at no cost. *The utility is your friend and may be*



## Fish and Wildlife Service Energy Check Sheet

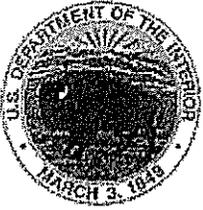
Energy and Water Conservation  
December 22, 2005

able to assist the field station. For further information, consult the "Demand Side Energy Management Guidelines", available on the Service's website. Inquire about how to shift loads to non-peak periods and any rebate programs that may be available.

**CASE STUDY:** A "Green Team" in the Northeast Regional Office worked with the building owner to schedule an energy audit to make the building more energy efficient. Energy Conservation Measures identified included: retrofitting almost 800 overhead fluorescent fixtures by installing new reflectors, electronic ballasts, and reducing the number of fluorescent tubes by half; replacing 33 incandescent exit signs with LED exit signs; installing occupancy sensors; replacing halogen and incandescent bulbs with compact fluorescent bulbs; installing timers on hot water heaters; and installing Vending Misers for the cafeteria vending machines. With over \$33,000 in incentives provided by the local utility, an investment of \$56,000 from the building owner, and almost \$3,000 provided by the "Green Team", these improvements were made throughout the building. The expected payback is 2.7 years, with an annual electrical savings of approximately 225,000 kWh. After payback, the improvements are projected to result in cost savings of over \$20,000 annually.

- ❖ Coordinate with State and local government agencies to reduce energy consumption in our buildings and facilities. These strategies include:
  - Identify short and long-term facility and fleet management energy reduction measures and projects;
  - Monitor total facility demand;
  - Enter into creative financing through partnering with utilities and energy services companies. See the Database of State Incentives for Renewable Energy at [www.dsireusa.org](http://www.dsireusa.org)
- ❖ Energy Awareness. *A palette of management tools may be used increase energy awareness.*
  - Alert employees of the need to conserve energy (e.g., send periodic e-mail messages about turning off lights and computers and implementing other efficiency practices, or post signs or billboards near communal printers, etc.).
  - Employee awareness campaigns can modify employee behaviors, which can achieve big savings simply by teaching employees to turn off lights, shut down equipment, and keep thermostat temperatures down when areas are not occupied or being used. DOE offers a variety of materials, such as





# Northeast Regional Office U. S. Fish and Wildlife Service



## Environmental Policy

The mission of the U. S. Fish and Wildlife Service is working with others to conserve, protect, and enhance fish, wildlife, and plants and their habitats for the continuing benefit of the American people.

To carry out this mission, and to ensure the preservation, conservation, and enhancement of ecological resources with which the Service is entrusted, the Northeast Regional Office will follow Director's Order 144, "Greening the Service through Environmental Leadership." As such, we will make responsible energy use fundamental to the operation of the Regional Office by emphasizing energy awareness, conservation, and efficiency. Reducing or eliminating the use of toxic chemicals will be our goal for landscape management and we will look for alternatives that are more beneficial to ecosystems, including the use of native landscape materials. We will also purchase environmentally preferable products, reuse materials on site or send them offsite for recycling, maximize water conservation, and manage fleets and transportation to reduce dependency on nonrenewable energy sources and maximize environmentally friendly practices. In accordance with Director's Order 144, we will collaborate with our building owner to implement these practices when appropriate.

In demonstrating environmental stewardship, we hope to set an example to be followed, in the workplace and at home, not only by Regional Office employees, but also by Service employees at field stations; contractors, suppliers, vendors, volunteers, partners, and stakeholders, including Federal, State, county, and local governments and communities; and non-governmental organizations. We will work with these entities to promote sound environmental management to ensure that healthy fish, wildlife, and plant species and their habitats are sustained for the continuing benefit of the American people.

We will regularly assess our progress and will strive for continual improvement in all of these environmental management areas.

UNIVERSAL ELECTRIC CO. INC.  
59 OBSERVER STREET  
SPRINGFIELD, MA 01104  
413-788-9473 FAX # 413-788-0874

---

---

FACSIMILE TRANSMITTAL SHEET

---

TO:	FROM:
Catherine Hibbard	Marc N. Riel
COMPANY:	DATE:
Fish & Wildlife Bldg	3-9-06
FAX NUMBER:	TOTAL NO. OF PAGES INCLUDING COVER:
413-253-8468	6
PHONE NUMBER:	SENDER'S REFERENCE NUMBER:
RE:	YOUR REFERENCE NUMBER:
Lighting Retro-Fit Work	

---

---

Run Date: 03/09/2006

Project #: M060092

Status: Pending WMECO Approval

**UNIVERSAL ELECTRIC**

59 Observer Street

Springfield, MA 01102

Phone: (413)788-9473

March 9, 2006

Amherst Development Assoc

Po Box 180

W Springfield, MA 01090

Dear Bill K:

The following is a summary of proposed retrofit work to be performed in accordance with Western Massachussetts Electric Company's (WMECO) Small Business Energy Advantage program:

End use: **Lighting**

Business area(s) serviced:

Estimated annual energy savings:	233,095 kWh
Estimated electric cost savings:	\$34,962.11
Estimated payback period (before incentive):	3.4 years
Material:	\$62,838.00
Labor:	\$55,396.00
Subtotal:	\$118,234.00



**Project Total**

Estimated annual energy savings for the ECM's listed above:	233,095 kWh
Estimated electric cost savings:	\$34,962.11
Estimated payback period (after incentive):	1.8 years
Material/labor:	118,234.00
Sales Tax:	\$3,141.90
Total project cost:	121,375.90
<u>Customer Cost Summary:</u>	
Material/labor:	118,234.00
WMECO Incentive:	<u>(\$58,867.00)</u>
Customer balance w/out tax:	\$59,367.00
Sales Tax:	<u>\$ 3,141.90</u>
Net total cost to customer:	\$62,508.90
Monthly payment:	\$2,841.31
# of months:	22

The lighting estimates described above are based on a review of a sample of lighting fixtures in your facility. For all measures, operating hour estimates provided by representatives of your facility are used to calculate savings. All existing lighting fixtures are assumed to be fully operational. The Energy Advantage Customer Assessment report explains the proposed retrofit in detail. Conditions found during the installation phase may require revisions to the proposed estimates, based on actual measures installed. Changes in processes, operations, equipment or operating hours will impact the savings estimates.

~~The documentation for this agreement consists of the Customer Application Agreement, Customer Assessment and this document.~~

This Agreement shall be valid only if accepted and signed by the customer by . Failure to sign this agreement by this date may render this agreement null and void.

Thank you for considering the Small Business Energy Advantage Program.

I have read this document and reviewed the Assessment report. I understand that the values described above are estimates and that actual results may vary.

X \_\_\_\_\_  
Customer Signature

\_\_\_\_\_  
Date

# Customer Assessment

Name: AMHERST DEVELOPMENT ASSOC  
 Address: 300 WESTGATE CENTER DR  
 HADLEY MA 01035  
 Contact: BILL K Ph.: (413)253-8200

WMECO Account #: 033716426  
 Project Administrator: KIERNAN, KIM E.  
 Rate code: OG  
 Total sq.ft.: 600

Installation before	Installation after	Lifetime (yrs.) operation	Annual hours of operation	Annual KW savings	Annual kWh savings	Lifetime kWh savings (1000's)	Annual \$\$ savings	Cost of (*) installation	Incentive (yrs.)	Net (*) pay-back (yrs.)
<b>End Use Lighting</b>										
Location:										
Item: Cust Ltg: DIMMABLE	Item: Cust Ltg: DIMMABLE COMPACT FLOOD									
Type: --	Type: --									
Qty.: 120	Qty.: 120	10	4,368	7.20	31,440	314.4	\$4,716.00	\$3,600.00	\$1,800.00	0.3
Watts: 75	Watts: 15									
Location:										
Item: Cust Ltg: HIGH WATTAGE	Item: Cust Ltg: SUPER T8 LAMP									
Type: --	Type: --									
Qty.: 270	Qty.: 270	3	4,368	1.35	5,940	17.8	\$891.00	\$7,020.00	\$3,510.00	3.9
Watts: 32	Watts: 27									
Location:										
Item: Cust Ltg: ELECTRIC HOT	Item: Cust Ltg: TIMER									
Type: --	Type: --									
Qty.: 6	Qty.: 6	12	520	0.00	936	11.2	\$140.40	\$1,050.00	\$525.00	3.7
Watts: 1,500	Watts: 1,500									
Location:										
Item: Cust Ltg: 2X4 RECESSED	Item: Cust Ltg: DELAMP RETRO TO 2X4 2L W									
Type: --	Type: --									
Qty.: 754	Qty.: 754	12	4,368	39.20	171,158	2,053.9	\$25,673.70	\$95,004.00	\$47,502.00	1.8
Watts: 104	Watts: 52									
Total End Use:										
		49.91	233,095	2,763.3	\$34,962.11	118,234.00	\$58,867.00			1.6

) Does not include sales tax (if applicable).

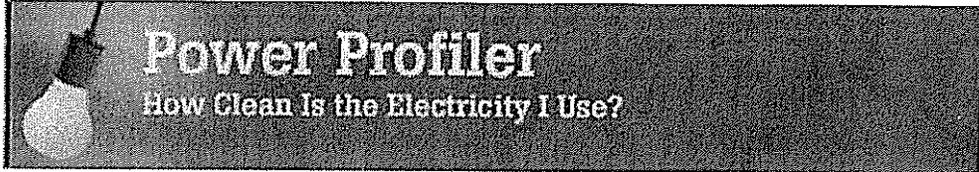
**Customer Assessment**

Name: AMHERST DEVELOPMENT ASSDC  
 Address: 300 WESTGATE CENTER DR  
 HADLEY MA 01035  
 Contact: BILL K Ph.: (413)253-8200  
 WMECO Account #: 033716426  
 Project Administrator: KIERNAN, KIM E.  
 Rate code: 0G  
 Total sq.ft.: 600

	Annual kW savings	Annual kWh savings	Lifetime kWh savings (1000's)	Annual \$ savings	Annual \$ Cost of (*)	Net (*) pay-back (yrs.)
<b>Project Total</b>	49.91	233,095	2,763.3	\$34,962.11	\$118,234.00	58,867.00 1.6

(\*) Does not include sales tax (if applicable).

Customer, initial & date \_\_\_\_\_



CLEAN ENERGY HOME ENERGY & YOU  
 How does energy use affect the environment?  
 How clean is the electricity I use?  
Power Profiler  
 How can I make a difference?

EPA CLEAN ENERGY PROGRAMS STATE AND LOCAL GOVERNMENTS ENERGY EFFICIENCY ACTION PLAN UTILITY POLICY eGRID RENEWABLE ENERGY MODELING SERIES

TOOLS CLEAN ENERGY EVENTS NEWSROOM GLOSSARY LINKS SITE MAP

# What Air Emissions Are Caused by the Electricity I Use? (Based on \$233,095 kWh/year)

The table below presents the estimated pounds of pollutants attributable to the electricity you use in your home or business during one year, along with a description of what these numbers mean in everyday terms. It also repeats the earlier chart that compares your region's air emissions rates to the national average.

ZIP code: **01035** Distribution Utility: **Western Massachusetts Elec Co**

## YOUR ANNUAL EMISSIONS

**1**  
**What Are My Annual Emissions?**  
 This is an estimate of the pounds of air pollutants caused by the electricity you use in your home or business during one year.

382	pounds of <u>nitrogen oxides</u>
960	pounds of <u>sulfur dioxide</u>
227,936	pounds of <u>carbon dioxide</u>

Note: Your annual emissions include an adjustment for line losses of 9 percent.

## WHAT DOES THIS MEAN?

**2**  
**What Do these Numbers Mean in Real Terms?**



Adding one car to the road results in 11,450 pounds of carbon dioxide emissions per year. Adding one SUV to the road results in 16,035 pounds of carbon dioxide emissions per year. For example, if your annual carbon dioxide emissions are 16,000 pounds, that equals adding approximately 1 SUV or 1.4 cars

WHAT CAN I DO TO MAKE A DIFFERENCE?

Be More  
Energy Efficient

Find out how you can make a difference by making your home or business more **energy efficient**.

Buy Green Power

Learn how you can **buy green power** (power generated from renewable energy sources) for your home or business.

**Note:** The information reported above is derived from EPA's eGRID database for calendar year 2000.

March 2005

Vehicle Tips brought to you by the Green Team and . . .



**Problem:**

Aggressive driving (speeding, rapid acceleration and braking) is not only unsafe - - it can lower your gas mileage by 33 percent at highway speeds and by 5 percent around town.

**Solution: Drive Sensibly**

Fuel Economy Benefit: 5-33%

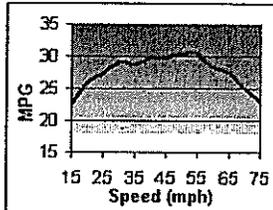
Equivalent Gasoline Savings: \$0.07-\$0.49/gallon



It's safer too!

**Problem: Speeding**

Gas mileage decreases at speeds above 60 mph. Each 5 mph you drive over 60 mph is like paying an additional \$0.10 per gallon for gas.



**Solution: Observe Speed Limits**

<b>Fuel Economy Benefit:</b>	<b>7-23%</b>
<b>Equivalent Gasoline Savings:</b>	<b>\$0.10-\$0.34/gallon</b>

It's safer too!



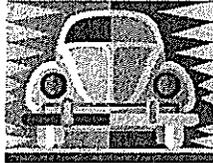
**Problem: Excessive Idling**



Idling gets 0 miles per gallon. Cars with larger engines typically waste more gas at idle than do cars with smaller engines.

**Solution:**

Spare the air! Do not idle more than 5 minutes.



**Problem:  
Improper Tire  
Inflation**

Under-inflated tires can lower gas mileage by 0.4 percent for every 1 psi drop in pressure of all four tires.

RECOMMENDED			
	FRONT	REAR	SPARE TIRE
TIRE SIZE	P 145/80R12	T 155/80R13	
COLD TIRE PRESSURE	32 PSI	60 PSI	
AT MAX LOAD	220 KPA	420 KPA	
VEHICLE CAPACITY			
MAX. LOAD (KGS)	888	800	MAX. LOAD (LBS) 1940
OCCUPANTS	FRONT 2	REAR 2	
SEE OWNER'S MANUAL FOR ADDITIONAL INFORMATION			

**Solution:** Inflate tires to the proper pressure and improve your gas mileage by around 3.3 percent.

- **Fuel Economy Benefit:** up to 3%
- **Equivalent Gasoline Savings:** up to \$0.05/gallon

It's safer too!



**Problem: Not Using the  
Recommended Grade  
of Motor Oil**

using 10W-30 motor oil in an engine designed to use 5W-30 can lower your gas mileage by 1-2 percent. Using 5W-30 in an engine designed for 5W-20 can lower your gas mileage by 1-1.5 percent.



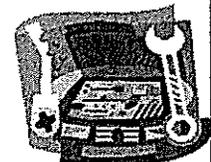
**Solution: Use the Recommended  
Grade of Motor Oil**

<b>Fuel Economy Benefit:</b>	1-2%
<b>Equivalent Gasoline Savings:</b>	\$0.01-\$0.03/gallon

Re-refined oil is available in most grades and is better for the environment!

**Problem: Improperly Tuned Engine**

Fixing a car that is noticeably out of tune or has failed an emissions test can improve its gas mileage by an average of 4.1 percent.



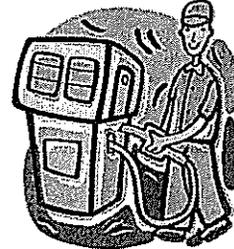
### Solution: Tune-up!

**Fuel Economy Benefit:** 4-40%  
**Equivalent Gasoline Savings:** \$0.06-\$0.60/gallon

If your car has a faulty oxygen sensor, your gas mileage may improve *as much as 40 percent*.

### Problem: Clogged Air Filter

A dirty air filter can decrease your car's gas mileage by as much as 10 percent.



### Solution: Check & Replace Air Filters Regularly

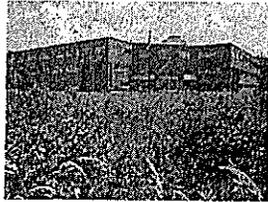
Your car's air filter keeps impurities from damaging the inside of your engine. Not only will replacing a dirty air filter save gas, it will protect your engine.

**Fuel Economy Benefit:** up to 10%  
**Equivalent Gasoline Savings:** up to \$0.15/gallon

April 2005

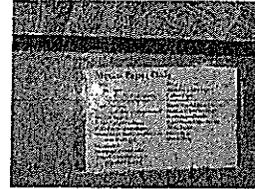
### Suggestions from you on greening the RO

- How about trying to create a wildflower meadow out of the reed canary grassland in front of the lawn (front parking area)?



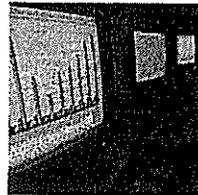
### Suggestions from you on greening the RO

- Recycle more paper - the cleaning crew tells me that many people are still putting recyclable paper in their waste paper basket and the crew throws it out each night.



### Suggestions from you on greening the RO

- Turn off computers at the end of the work day.



### Suggestions from you on greening the RO

- I'm interested in making our building a little less hazardous to migratory birds. I remember last year at one point, I came in through the front entrance and watched a phoebe fly right into the glass. When I went to find it, there were 2 other birds in the same spot already dead.

**Birds & Buildings: Collision Review Worksheet**

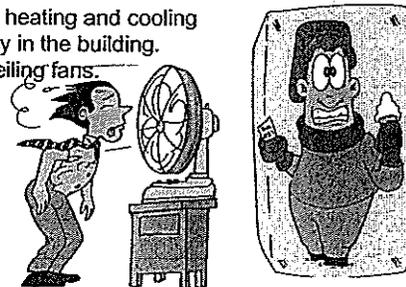
### Suggestions from you on greening the RO

- How about a central location people can drop off paper to be reused? Rather than immediately tossing paper into the recycle bin, if it has a good (blank) side, take it to a collection point for reuse.



### Suggestions from you on greening the RO

- Improve heating and cooling efficiency in the building. Install ceiling fans.



### Suggestions from you on greening the RO

- Have some type of car pool board to identify those interested.



### Suggestions from you on greening the RO

- Install motion detector for lights in the rest rooms, exercise room, and conference rooms.



### Suggestions from you on greening the RO

- Install recycling bins throughout the building for plastic and metal.



### Suggestions from you on greening the RO

- Turn off under cabinet lights and lamps at the end of the work day.



### Suggestions from you on greening the RO



- It would be great to have plastic recycling containers by all the kitchen areas. That way, people can wash out their cans/bottles and throw it right in the recycling container.

### Suggestions from you on greening the RO

- Recycle printer cartridges office-wide.

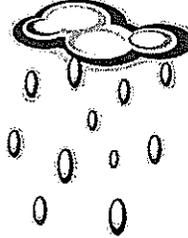


### Suggestions from you on greening the RO

- Any thought to including telecommuting in this wonderful list of things we can do to green up?

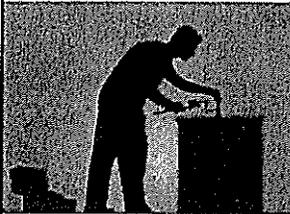


### Suggestions from you on greening the RO



- Install moisture-sensitive sprinklers so they turn off when it's raining.

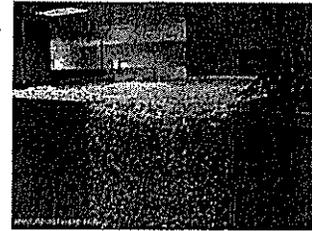
### Suggestions from you on greening the RO



- Replace rest-room faucets so you can control water flow - current water saving faucets use more water than others.

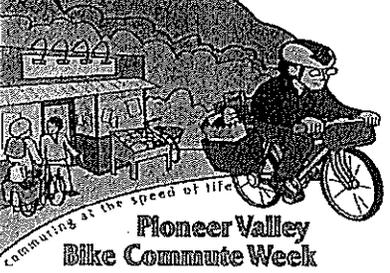
### Suggestions from you on greening the RO

- Have central location to store packing materials (packing peanuts, bubble wrap) for reuse.



May 2005

**Pioneer Valley Bike Week**  
Bike COMMUTE Week, May 14 - 21, 2005



**Pioneer Valley  
Bike Commute Week**

**Pioneer Valley Bike Week**  
Bike COMMUTE Week, May 14 - 21, 2005

EVENTS ARE SCHEDULED IN THESE TOWNS:

- Amherst
- Chicopee
- Deerfield / Montague
- Easthampton
- Greenfield
- Hadley
- Holyoke
- Northampton
- Springfield
- Westfield
- West Springfield



**Pioneer Valley Bike Week**  
Bike COMMUTE Week, May 14 - 21, 2005

Automobiles are the single largest source of air pollution in the United States.

Short trips, those that are most bikeable, are up to three times more polluting per mile than long trips.



**Pioneer Valley Bike Week**  
Bike COMMUTE Week, May 14 - 21, 2005



More bicycle use means less benzene, cyanide, lead, carbon monoxide, CFCs, sulfates, and ozone in the air we breathe.

**Pioneer Valley Bike Week**  
Bike COMMUTE Week, May 14 - 21, 2005

On average a commute from the Northampton Bridge (4 miles) would prevent nearly 15 pounds of particulates and gasses from contaminating our air.



**Pioneer Valley Bike Week**  
Bike COMMUTE Week, May 14 - 21, 2005

Because the bicycle season matches the ground-level ozone season, by biking instead of driving, you contribute to pollution prevention when it is most needed.



## Pioneer Valley Bike Week

Bike COMMUTE Week, May 14 - 21, 2005



Saturday, May 21  
**Norwottuck Rail Trail**  
Birding and Biking  
8:00AM - 12 Noon  
Info: Megan Briggs 527-8980

## Pioneer Valley Bike Week

Bike COMMUTE Week, May 14 - 21, 2005

Website:  
[www.Massbike.org](http://www.Massbike.org)

## Pioneer Valley Bike Week

Bike COMMUTE Week, May 14 - 21, 2005

Ride your bike, get a free breakfast, and win great bike stuff!

Thursday May 19 **Hadley**  
Valley Bicycles trailside, on Norwottuck Rail Trail, 7-9AM

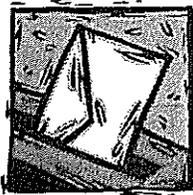
Friday May 20 **Amherst**  
Breakfast on town Green  
7:30 - 10:30 am



June 2005

### Reduce Junk Mail

- 4 million tons of paper junk mail is sent each year
- Nearly half of all junk mail is never opened



### Environmental Costs of Junk Mail

- Inks containing heavy metals
- Energy to produce, deliver, and recycle



### Reduce Junk Mail

Get off mailing lists

Direct Marketing Association  
[www.dmaconsumers.org](http://www.dmaconsumers.org)

Click on Consumer Assistance

- good for 5 years
- will stop 75% of national mailings



### Environmental Costs of Junk Mail

- Deforestation: in 1991, 62 million trees were cut for junk mail
- Pulp processing for junk mail requires 25 billion gallons of water



### Reduce Junk Mail

- In 1989, 55 million catalogs were sent
- In 1991, over 74,000 acres of trees were cut just for catalogs



### Reduce Junk Mail

Reduce **unwanted** catalogs

write: Abacus, P.O. Box 1478, Broomfield,  
CO 80038

or email: [optout@abacus-direct.com](mailto:optout@abacus-direct.com).

Include full name and current address

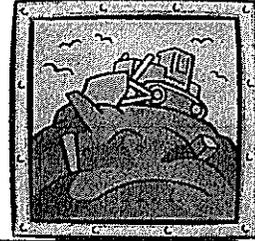
### Reduce Junk Mail

Reduce credit card offers by calling  
888-567-8688  
(888-5OPTOUT)



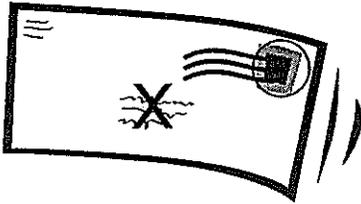
### Reduce Junk Mail

- Americans spend over \$275 million to dispose of junk mail
- Junk mail is an estimated two percent of municipal solid waste



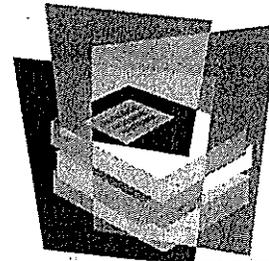
### Reduce Junk Mail

- **First class mail:** Cross out the address and bar code, circle the first class postage and write "refused: return to sender". Drop in any mail box, it will be returned to the sender.



### Reduce Junk Mail

- Magazines - look up the 800 number and ask them to take you off of their list



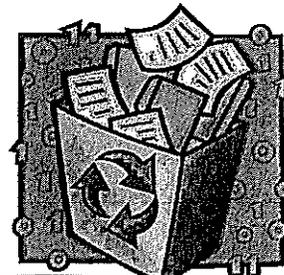
### Reduce Junk Mail

- When dealing with a company or charity that knows your address, tell them "Don't rent or share my name."



### Recycle Junk Mail

Junk mail (including envelopes with windows) can be recycled in our mixed paper recycling bins



July 2005

### How we plan to use greening seed money



- Purchase motion detectors for lights in locker rooms, conference rooms, restrooms, and offices

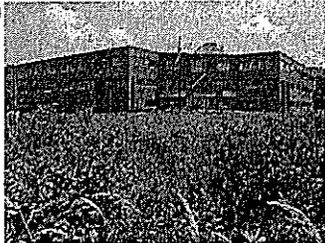
### How we plan to use greening seed money

- Purchase recycling containers for kitchenettes



### How we plan to use greening seed money

- Contract with UMass Urban Horticulture Program for environmentally friendly lawn care evaluation/plan



### How we plan to use greening seed money

- Purchase energy-saving Vending Misers for vending machines



### How Vending Misers Work

- Sensor powers up vending machine when anyone approaches, and powers down when the area is vacant
- Measures ambient temperature and compressor current and repowers the vending machine to maintain cold temperature

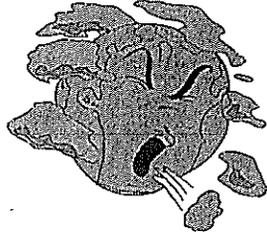
### Vending Misers . . .

Coca-Cola and Pepsi-Cola concluded that Vending Misers have no adverse impacts on product quality or on vending machines.



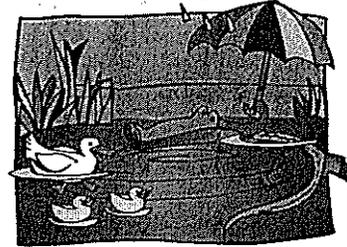
**Greenhouse Gas Emissions  
Reduced Yearly by one Vending  
Miser**

- 2200 lbs. of CO2
- 8 lbs. of NOx



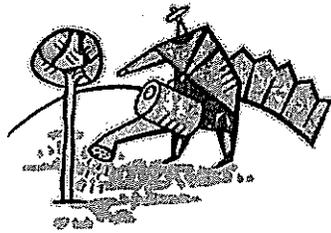
**How we plan to use greening  
seed money**

- Purchase rain sensor for irrigation system  
(so sprinklers don't turn on in the rain!)



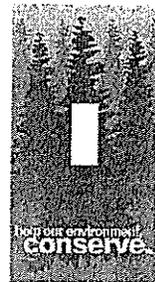
**How we plan to use greening  
seed money**

- Contract with UMass Urban Horticulture  
Program for tree care evaluation/plan



**How we plan to use greening  
seed money**

- Purchase signs/labels for lights  
switch plates



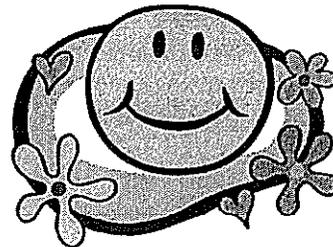
**How we plan to use greening  
seed money**

- Purchase low flow shower heads



**How we plan to use greening  
seed money**

- Purchase greening promotional items

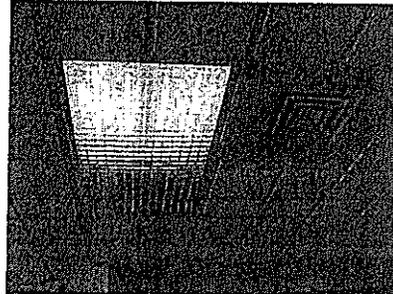


August 2005

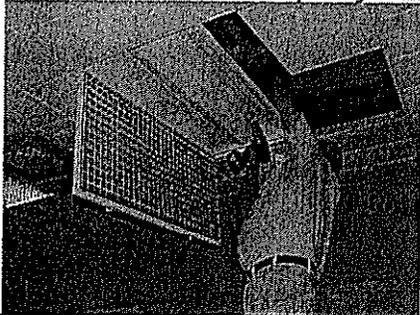
Results of the RO Energy Audit  
Conducted by a Western  
Massachusetts Electric Company  
(WMECO) Subcontractor



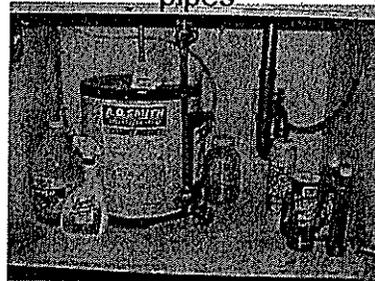
Issue: More fluorescent lamps than needed to light the office



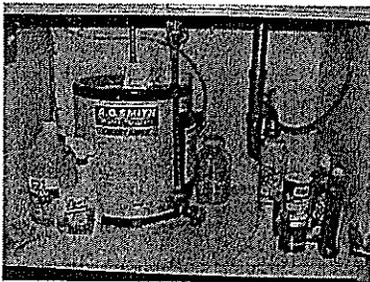
Solution: Use WMECO program to fund installing reflective surface in ballasts to reduce need for lamps by 50%



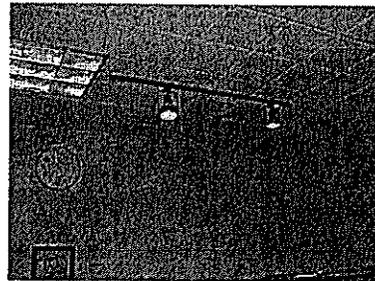
Issue: Hot water heaters run all day, but have low demand; no insulation on pipes



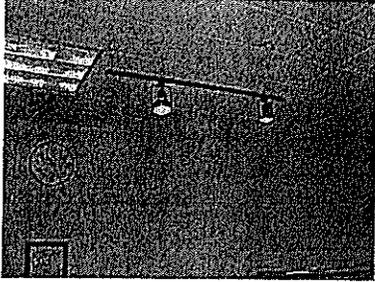
Solution: Use WMECO program to fund timers and insulation



Issue: Energy inefficient halogen and incandescent bulbs



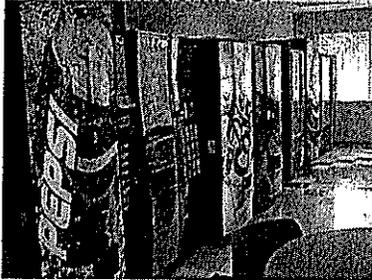
Solution: Use WMECO program to fund replacing inefficient bulbs with compact fluorescent bulbs



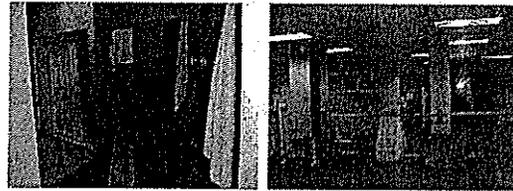
Issue: Vending machines use energy for display lights when room is unoccupied



Solution: Use WMECO program to fund Vending Misers for vending machines



Issue: Lights in rooms left on



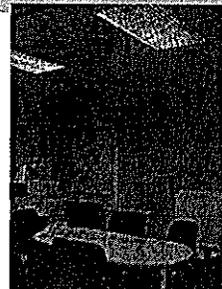
Locker Rooms

Workout Room

Solution: Use WMECO program to fund motion detectors in rooms with at least 3 sets of overhead lights



Solution: Use Green Team seed money to fund motion detectors for rooms with one or two sets of overhead lights



Get a free energy audit for your home!



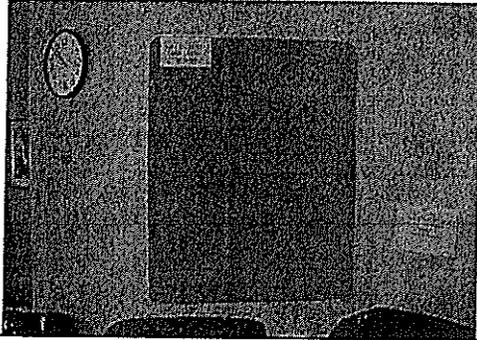
- Visit [MassSave.com](http://MassSave.com) for details

**No-Cost Home Energy Assessment**

Receive a free professional energy audit with specific recommendations that will save you money!



Thank you, Bobby, for installing the Green Team Bulletin Board!



September 2005

**ReStore, a local example of recycling**  
[restore@cetonline.org](mailto:restore@cetonline.org)

The ReStore accepts donations of quality but unwanted home improvement materials and sells them to the public at low prices in a convenient retail setting.



250 Albany Street,  
Rear  
Springfield, MA  
01105  
413-788-6900  
Tues-Fri 9-4, Sat 8-4

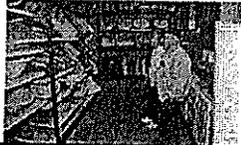


**ReStore, a local example of recycling**  
[restore@cetonline.org](mailto:restore@cetonline.org)

The ReStore is an enterprise of the Center for Ecological Technology (CET), a 25-year-old non-profit (501c3) community based environmental organization with offices in Northampton and Pittsfield.



250 Albany Street,  
Rear  
Springfield, MA  
01105  
413-788-6900  
Tues-Fri 9-4, Sat 8-4



**ReStore, a local example of recycling**  
[restore@cetonline.org](mailto:restore@cetonline.org)

ReStore's inventory:

- Used and salvaged materials
- Surplus stock from the building industry



250 Albany Street,  
Rear  
Springfield, MA  
01105  
413-788-6900  
Tues-Fri 9-4, Sat 8-4



**ReStore, a local example of recycling**  
[restore@cetonline.org](mailto:restore@cetonline.org)

Items are accepted from:

- Homeowners
- Contractors
- Manufacturers
- Retailers
- Municipal collection centers



250 Albany Street,  
Rear  
Springfield, MA  
01105  
413-788-6900  
Tues-Fri 9-4, Sat 8-4

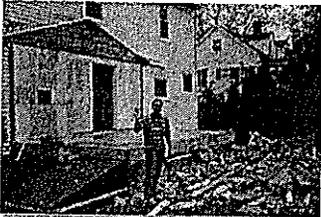


**ReStore, a local example of recycling**  
[restore@cetonline.org](mailto:restore@cetonline.org)

Are usable items being removed during your remodeling or construction project?



250 Albany Street,  
Rear  
Springfield, MA  
01105  
413-788-6900  
Tues-Fri 9-4, Sat 8-4



**ReStore, a local example of recycling**  
[restore@cetonline.org](mailto:restore@cetonline.org)

Is your basement, garage or shop overflowing with stuff you can't use but you know is too good to throw away?



250 Albany Street,  
Rear  
Springfield, MA  
01105  
413-788-6900  
Tues-Fri 9-4, Sat 8-4



ReStore, a local example of recycling  
[restore@ctonline.org](mailto:restore@ctonline.org)

Donate your materials to the ReStore!

- Save money on disposal
- Get a tax deduction
- Free up storage space
- Conserve building materials

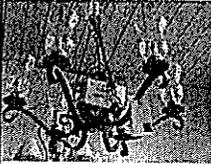



250 Albany Street, Rear  
 Springfield, MA 01105  
 413-788-6900  
 Tues-Fri 9-6, Sat 8-4

ReStore, a local example of recycling  
[restore@ctonline.org](mailto:restore@ctonline.org)

**Items Accepted:**

- Kitchen Items
- Bathroom Items
- Unopened Latex Paint
- Doors and Windows
- Flooring
- Building Materials
- Electrical
- Other




250 Albany Street, Rear  
 Springfield, MA 01105  
 413-788-6900  
 Tues-Fri 9-6, Sat 8-4

ReStore, a local example of recycling  
[restore@ctonline.org](mailto:restore@ctonline.org)

ReStore has been featured in:

- The American Builder
- WFCR public radio
- Biocycle, Journal of Composting & Organics Recycling
- Fine Homebuilding magazine
- Green Living Journal




250 Albany Street, Rear  
 Springfield, MA 01105  
 413-788-6900  
 Tues-Fri 9-6, Sat 8-4

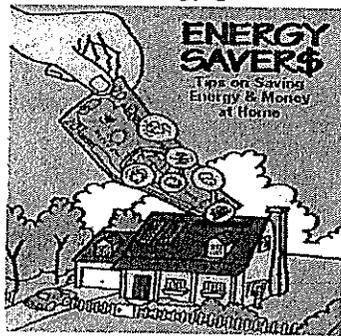
ReStore, a local example of recycling  
[restore@ctonline.org](mailto:restore@ctonline.org)

250 Albany Street Rear  
 Springfield, MA  
 413-788-6900  
 Tuesday - Friday 9-6,  
 Saturday 8 -4

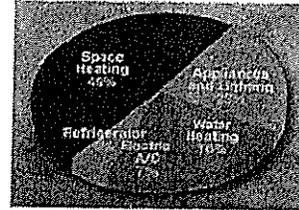



October 2005

<http://www.eere.energy.gov/consumer/tips/>



<http://www.eere.energy.gov/consumer/tips/>

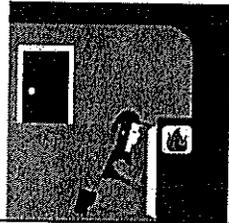


How We Use Energy in Our Homes Heating accounts for the biggest chunk of a typical utility bill.

### Heating Tips

<http://www.eere.energy.gov/consumer/tips/>

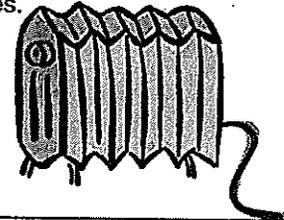
- Clean or replace filters on furnaces once a month or as needed.
- Bleed trapped air from hot-water radiators once or twice a season.



### Heating Tips

<http://www.eere.energy.gov/consumer/tips/>

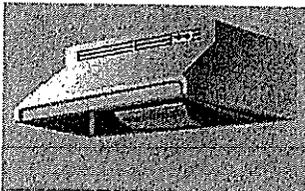
- Clean warm-air registers, baseboard heaters, and radiators as needed; make sure they're not blocked by furniture, carpeting, or drapes.



### Heating Tips

<http://www.eere.energy.gov/consumer/tips/>

- Turn off kitchen, bath, and other exhaust fans within 20 minutes after you are done cooking or bathing.



### Heating Tips

<http://www.eere.energy.gov/consumer/tips/>

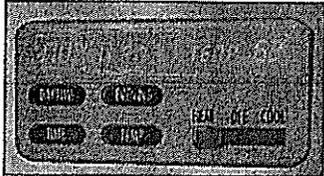
- Keep your fireplace damper closed unless a fire is going.
- Keeping the damper open is like keeping a window wide open during the winter.



### Heating Tips

<http://www.eere.energy.gov/consumer/tips/>

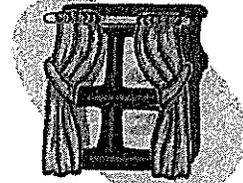
- You can save up to 10% a year on your heating bills by turning your thermostat back 10-15% for 8 hours.
- You can do this with a programmable thermostat.



### Heating Tips

<http://www.eere.energy.gov/consumer/tips/>

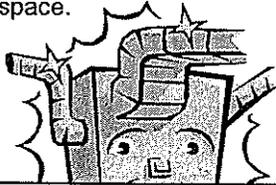
- Keep draperies and shades on south-facing windows open during the day and closed at night.
- Keep south-facing glass clean.



### Heating Tips

<http://www.eere.energy.gov/consumer/tips/>

- Insulate heat ducts.
- You can lose up to 60% of your heated air if your ducts aren't insulated and they travel through unheated spaces such as the attic or crawlspace.



### Heating Tips

<http://www.eere.energy.gov/consumer/tips/>

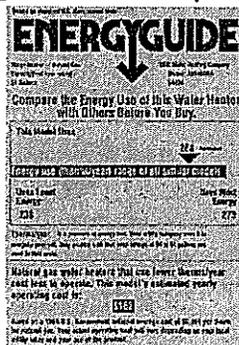
- For furnaces, look for high Annual Fuel Utilization Efficiency (AFUE) ratings.
- The national minimum is 78% AFUE, but there are **ENERGY STAR** models on the market that exceed 90% AFUE.



### Heating Tips

<http://www.eere.energy.gov/consumer/tips/>

Check EnergyGuide labels when purchasing a new furnace or other appliance.



### Should I Insulate My Home?

Probably "yes" if you:

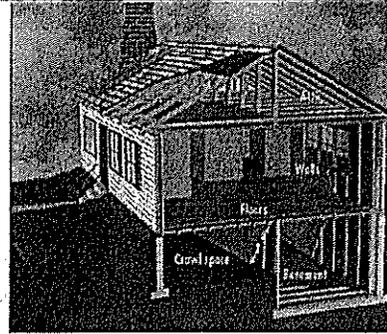
- Have a home built before 1980 and haven't added insulation.
- Are uncomfortably cold in the winter or hot in the summer.



## Should I Insulate My Home?

Probably "yes" if you:

- Build a new home, addition, or install new siding or roofing.
- Pay high energy bills.
- Are bothered by noise from outside—insulation muffles sound.



- **Where to Insulate**  
Adding insulation in the areas shown above may be the best way to improve your home's energy efficiency.

November 2005

Highest Fuel Economy 2006 Vehicles		MPG city/highway
1.	Honda Insight (hybrid-electric, manual)	60/66
2.	Toyota Prius (hybrid-electric)	60/51
3.	Volkswagen New Beetle and Golf (diesel, manual)	37/44
4.	Volkswagen Jetta (diesel, manual)	36/41
5.	Ford Escape Hybrid FWD	36/31



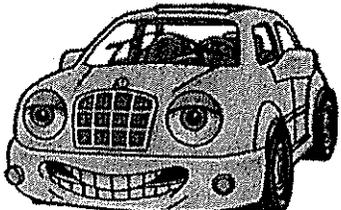
Highest Fuel Economy 2006 Vehicles		MPG city/highway
6.	Volkswagen New Beetle and Jetta (diesel, automatic)	35/42
7.	Volkswagen Golf (diesel, automatic)	33/44
8.	Ford Escape Hybrid 4WD Mazda Tribute Hybrid 4WD Mercury Mariner Hybrid 4WD	33/29 33/29 33/29
9.	Lexus RX 400H 2WD Highlander Hybrid 2WD	33/28 33/28
10.	Toyota Corolla (manual)	32/41



For more information on fuel economy, visit [www.fueleconomy.gov](http://www.fueleconomy.gov)




For more information on fuel economy, also visit [www.epa.gov/fueleconomy](http://www.epa.gov/fueleconomy)

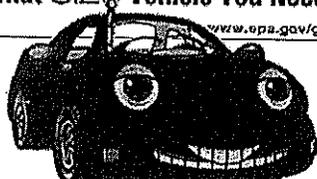


Low emissions and good fuel economy are both important for the environment.

Check out [www.epa.gov/greenvehicles](http://www.epa.gov/greenvehicles)

No Matter What Size Vehicle You Need...

[www.epa.gov/greenvehicles](http://www.epa.gov/greenvehicles)



The lowest emission 2006 vehicles are as follows . . .

No Matter What Size Vehicle You Need...

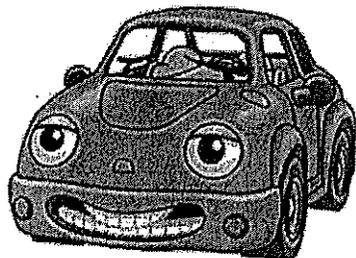
[www.epa.gov/greenvehicles](http://www.epa.gov/greenvehicles)



		CITY mpg	HWY mpg	
1. <u>TOYOTA</u> Prius	9.5	60	51	10
2. <u>HONDA</u> Civic Hybrid	9.5	49	51	10
3. <u>FORD</u> Escape Hybrid		36	31	8
4. <u>FORD</u> Escape Hybrid		33	29	8
4. <u>MERCURY</u> Mariner Hybrid	9.5	33	29	8
4. <u>MAZDA</u> Tribute Hybrid	9.5	33	29	8

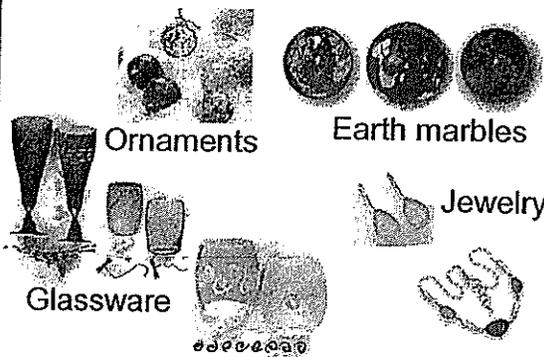
		CITY mpg	HWY mpg	
5. <u>MAZDA</u> 3	9.5	28	35	8
6. <u>SATURN</u> Ion	9.5	26	35	8
7. <u>FORD</u> Focus	9.5	26	34	7
7. <u>FORD</u> Focus Station Wagon	9.5	26	34	7
7. <u>MAZDA</u> 3	9.5	26	34	7

[www.epa.gov/greenvehicles](http://www.epa.gov/greenvehicles)  
can also help you find  
a green used car



December 2005

**Green Gift Ideas: Recycled Glass**



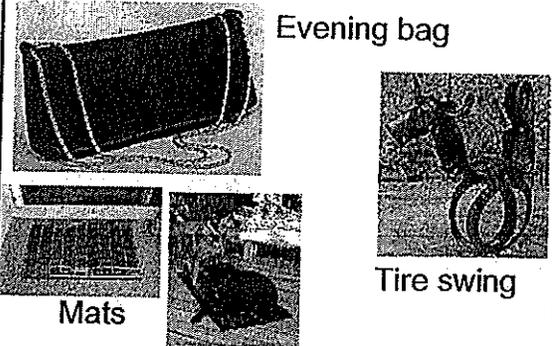
Ornaments

Earth marbles

Glassware

Jewelry

**Green Gift Ideas: Recycled Tires**



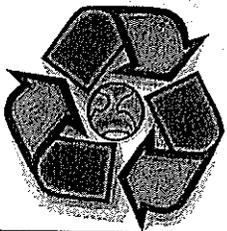
Evening bag

Mats

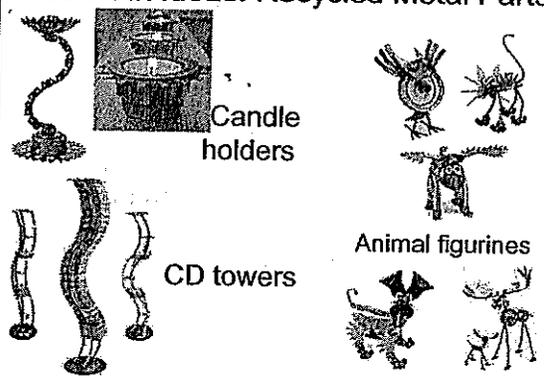
Tire swing

**Green Gift Ideas**

If every household reused just two feet of ribbon each year, the resulting 38,000 miles of ribbon could tie a bow around the earth.



**Green Gift Ideas: Recycled Metal Parts**

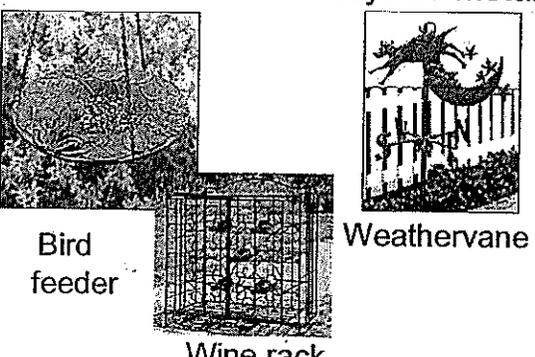


Candle holders

CD towers

Animal figurines

**Green Gift Ideas: Recycled Metal**



Bird feeder

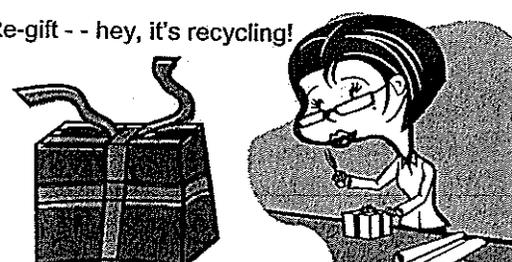
Wine rack

Weathervane

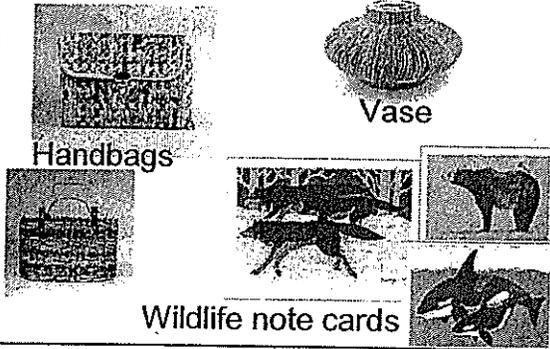
**Green Gift Ideas**

28% of people admit that they "re-gift."

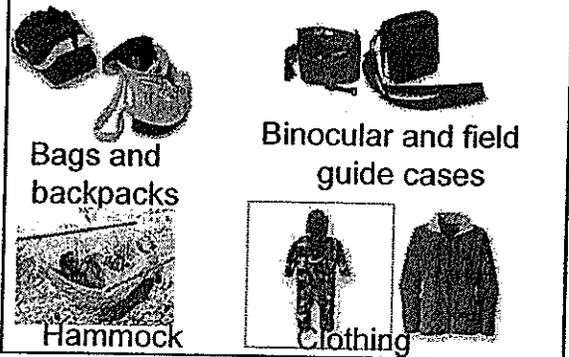
Re-gift - - hey, it's recycling!



**Green Gift Ideas: Recycled Paper**



**Green Gift Ideas: Recycled Plastic Bottles**

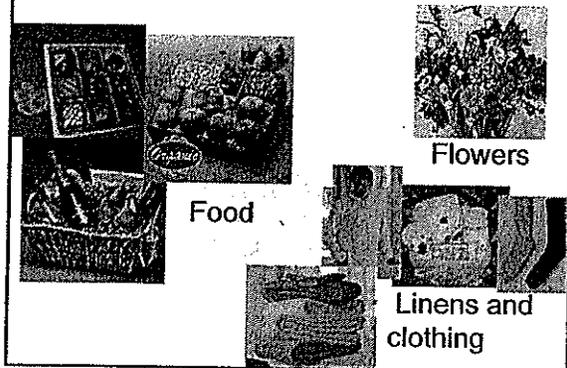


**Green Gift Ideas: Alternatives to standard wrapping paper**

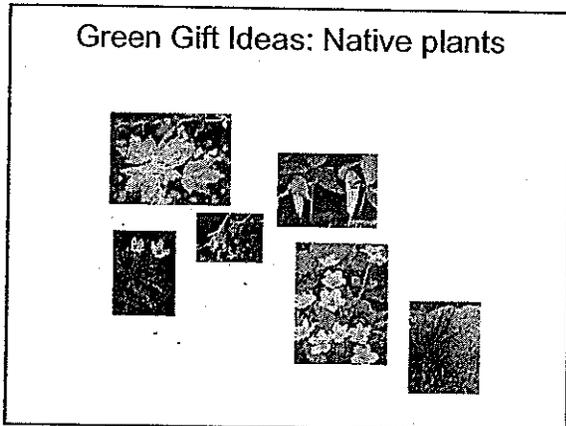
- Outdated calendar photos
- Sunday comics
- Maps
- Movie posters
- Old wrapping paper
- Wrapping a gift in a gift



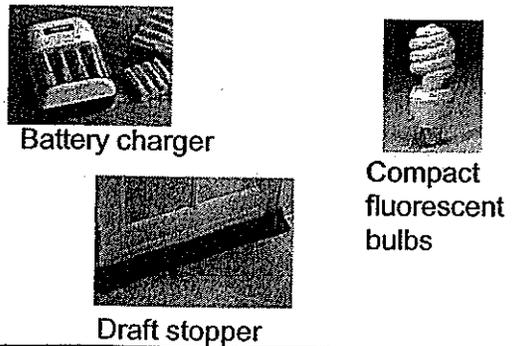
**Green Gift Ideas: Organic treats**



**Green Gift Ideas: Native plants**



**Green Gift Ideas: Energy Savers**



Green Gift Ideas: Solar Products



Outdoor lights



Portable laptop charger

Backpacks and bags to recharge your cell phone, digital camera, GPS, iPod, or PDA

