



Get YOUR Green On



Volume 1, Issue 4

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Buyin' Green

Saving Green

- Set your thermostat to 65 degrees during the day and 55 degrees at night. 
- If you have not done so, insulate your home or re-insulate.
- Install a clean burning natural gas or propane fireplace or stove, instead of wood burning. 
- Replace old toilets with 1-6 gallon low flow toilets.
- Air dry your clothes on a clothes line or drying rack, when weather allows.



Green purchasing includes the acquisition of recycled content products, environmentally preferable products and services, biobased products, energy- and water-efficient products, alternate fuel vehicles, products using renewable energy and alternatives to hazardous or toxic chemicals. Through several practices, the City of Des Moines utilizes Green Purchasing principles.



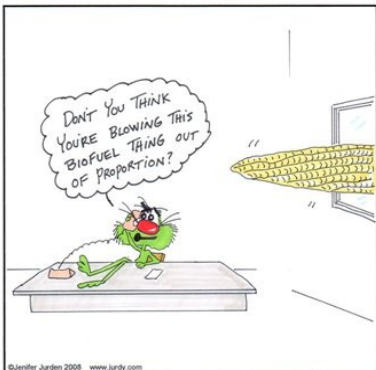
Only ENERGY STAR rated appliances are acquired for City facilities. ENERGY STAR is a joint program of the U.S. Environmental Protection Agency and the U.S. Department of Energy. It helps save money and protect the environment through energy efficient products and practices. All major home appliances must meet the Appliance Standards Program set by the U.S. Department of Energy (DOE). Manufacturers must use standardized test procedures developed by DOE to prove the energy use and efficiency of their products. Test results are printed on yellow Energy Guide labels, which manufacturers are re-

quired to display on many appliances. This label estimates how much energy the appliance uses, compares energy use of similar products and lists approximate annual operating costs. Exact costs depend on local utility rates and the type and source of energy. An ENERGY STAR qualified appliance must carry the Energy Guide label. Energy Guide labels note whether the product is ENERGY STAR qualified.



Biodiesel is made from renewable feedstocks, such as vegetable oils and animal fats, through a simple process and can be used in varying blends to power diesel engines. Biodiesel has been established as a proven renewable energy source. One of the main commodity sources for biodiesel is soybeans, a major crop produced by almost 400,000 farmers in 29 states. The City of Des Moines uses B10 Biodiesel fuel, a 10% blend of

Jurdy Green™



Save Your Greenbacks

October usually brings cooler weather and reminds us to turn on the heat in our homes. When you finally do, be sure that your system is running efficiently. Here are four things you can do now to prepare for the heating season:

1. Don't block your vents or radiators. You may need to move couches and beds or disassemble radiator-top bookshelves.

2. Plan on lowering your thermostat while you are out of the house or sleeping. A programmable thermostat will do the job for you. Make a commitment to install one this month and you can save about \$150 every year in energy costs.
3. Schedule regular professional service for you furnace or boiler. Find out what maintenance is required to keep your

heating system operating efficiently.

4. Change your furnace filter before heating season begins, and monthly throughout the winter.

The Rules of Nature

There are five facts that scientists agree on about the earth. These facts assist in explaining the need for us to operate within the natural laws and principles, rather than overcoming them. The earth has finite resources. The five facts are:

1. The earth is a closed system with respect to matter. Nothing enters or leaves (aside from the odd meteor or rocket), which means everything that was here two billion years ago is still here today. **There is no away:** matter can change form, but it doesn't leave.
2. The earth is an open system with respect to energy. In fact, energy from the sun is the only input into the system. This energy enters our atmosphere and is released back into space in the

form of heat. **The sun's energy drives everything.**

3. Life exists in the thin layer around the earth called the biosphere, which is thin as the skin of an onion. **The biosphere is very fragile**—as we're learning almost daily, and there is only so much wear and tear it can take. And it is certainly rare. As far as we know, there's only one in the entire universe, and the more we learn about it, the more complex and beautiful it turns out to be.
4. Photosynthetic organisms (plants and some algae) capture the sun's energy and use it to power their growth. This growth supports the development of every organism on earth—in other

words, **photosynthesis pays on bills.**

5. All life on earth depends on complex, self-regulating systems that circulate materials and energy in closed-loop cycles. Slow geological processes move materials from deep in the earth's crust (or lithosphere) to the biosphere and back again. Ecosystems in the biosphere rapidly cycle and recycle nutrients, water and energy from one organism to the next. **Nature works in efficient cycles where nothing is wasted.**

This information was taken from the *Sustainability Primer of Canada*, by The Natural Step.

Buyin' Green (continued from page 1)

Biodiesel and 90% conventional petroleum based diesel fuel during warm weather months. This replaces 25,000 gallons of petroleum based fossil fuel annually. Biodiesel has been established as a proven renewable energy source. The City consumes 500,000 gallons of diesel fuel in its fleet each year. Converting to Iowa produced locally refined Biodiesel, will reduce dependence on oil, support Iowa's agricultural economy and reduces fleet costs through improved engine performance and reduced maintenance. Biodiesel blended with ultra low sulphur diesel fuel helps maintain a healthy environment while providing a renewable source of fuel for the City's fleet.

Fleet Vehicles

Fleet Services Division has implemented

several initiatives to reduce the environmental impact of operating the City's fleet of 1,060 vehicles and equipment. They include:

- Acquired and placed into service gas electric hybrid vehicles and all electric utility vehicles. These vehicles are more efficient than the conventional cars they replaced, further reducing the City's dependence on fossil based fuels.
- Diesel engines have been specified where available to increase fuel efficiency 30% over older gasoline engines and utilize renewable Biodiesel fuel. Fleet Services is currently evaluating fuel additives and after-market add-on technologies to reduce fuel and oil consumption.

By continuing to implement environmental technologies, Fleet Services will meet the operational needs of departments to deliver services to residents, while maintaining a healthy environment.



Recycled Printer Paper

The use of 30% post consumer recycled printer paper costs slightly more than virgin paper but yields the following benefits for each ton of recycled paper that displaces a ton of virgin paper:

- Reduces total energy consumption by 27%
- Reduces greenhouse gas emissions by 47%
- Reduces particulate emissions by 28%
- Reduces wastewater by 33%

Reduces solid waste by 54%

Reduces wood use by 100%

Buying recycled products helps to establish demand for these items, as well as support recycling markets and community collection programs. There are many reasons why buying recycled products benefits the environment. Some include:

- Steps towards a sustainable system of paper production
- Conservation of resources and landfill space
- Reduction of waste and pollution

-Job creation

-Energy conservation

-Improved competitiveness



Green cleaning products

Whether contracted services or City use, alternative environmentally friendly cleaning products are purchased and used at City Facilities. Non-toxic citrus based degreasers are used by many departments in the daily cleaning of tools and equipment. Phosphate free facility cleaners are utilized by

Contractors and staff in maintaining city buildings.

Feel free to email YOUR green ideas to: rawetmore@dmgov.org