**Business Resource Center**

**Committed to the Triple Bottom Line**

**Fact Sheet: Responsible Energy Use**

**Introduction**

Energy use in small businesses occurs in many forms, including lighting, heating & cooling, and transportation. In addition, a great deal of energy is required for products sold and used by small businesses, including product manufacturing and packaging materials.

By utilizing more energy-efficient technologies and adapting some simple conservation techniques, small businesses can reduce their impact on the environment while also saving money. Additional benefits to adapting these “green” business practices include, improving public image and leveraging new marketing opportunities.

The following information on responsible energy use includes opportunities concerning equipment purchase and service; lighting; heating and cooling; other appliance use; and transportation.

This fact sheet was prepared by the **Business Resource Center (BRC)** – the community outreach component of Eastern Washington University’s College of Business and Public Administration. The BRC provides technical assistance, education, and research to individual businesses and community groups in the Spokane area. It is funded by Eastern Washington University, the Herbert B. Jones Foundation, and contracts with participating partners. The mission of the BRC is to generate, exchange, and apply knowledge to improve the economic vitality and sustainability of businesses and communities in the region.

### What are Green Business Practices?

Green business practices center around improvements in energy conservation; waste reduction and recycling; water conservation; pollution prevention; and transportation related impacts. Increasingly, numbers of Fortune 500 firms are scrutinizing their businesses in reference to these green business practices. Some are motivated by societal responsibility, but all recognize the direct economic benefits.

Small businesses can achieve the same benefits as larger Fortune 500 firms, but often lack the necessary resources to do so. Time, expertise, or knowledge of where to turn for technical assistance is often a challenge. Even though small businesses may be constrained in the current economic climate, this “disruption” creates a more receptive attitude toward new ideas, particularly those with measurable dividends. Small businesses that engage in green business practices often experience 10% to 20% reductions in operating costs. Realizing these benefits, however, requires increased awareness and technical knowledge of green business practices.

**Green business practices lead firms to a better work environment; a healthier workforce; more customers; and an increase in the bottom line.**

- City of Spokane SMART Recognition Program

### Equipment Purchase and Service

Selecting and maintaining appropriate equipment is important for increasing the energy efficiency of your business. Simple efficiency improvements may include:

- Replacing out-dated equipment with modern, energy-efficient equipment (i.e. ENERGY STAR products).
- Establishing maintenance routines for existing equipment.

If your air conditioning unit is more than 12 years old, replacing it with an ENERGY STAR qualified model could cut your utility costs by nearly 10%, annually.

### HVAC System

Energy use associated with heating, cooling, and ventilating buildings typically represents the majority (typically 50%) of a business’ utility expenses. Simple efficiency improvements may include:

- Limiting access to thermostats and installing timers to control temperature during off-hours.
- Conducting routine maintenance of heating and cooling appliances as well as ducting.
- Improving building insulation (ceilings, floors, walls, weather-stripping, caulking, door seals, and windows).
- Seal off or separate unused or storage areas and do not heat or cool these areas.
- Utilize window treatments (blinds, curtains, etc.) and ceiling fans to reduce cooling expenses in the summer.

Installing a programmable thermostat and following ENERGY STAR suggested settings can help you cut utility costs by nearly 10%, annually. Suggested ENERGY STAR settings are included in a table at the end of this document. For manual thermostats, adjusting temperatures 5°F to 8 degrees (down in winter, up in summer) during off-business hours can also help you save energy.
Lighting
Energy use associated with lighting can represent a significant portion (typically 20%) of a business’ utility expenses. Simple efficiency improvements may include:

- Installing energy-efficient lamps and ballasts (CFL bulbs, LEDs, etc.).
- Utilizing natural light when possible.
- Cleaning light fixtures regularly and utilizing reflectors to increase output.
- Installing timers or motion sensors to control lighting.

30% to 40% of personal computers are left on overnight and on weekends. Turning off one personal computer (with an average load of 200W) each night and weekend will save an average of $60.00 in utility costs, annually.

Other Appliance Use
In addition to heating and cooling appliances, a number of other appliances used in businesses have a significant impact on energy use. From water heaters to personal computers, some simple efficiency improvements may include:

- Turning off equipment when not in use. Note: screen savers on computers can actually use more energy than regular use.
- Removing or unplugging unused equipment.
- Improving the insulation of your water heater and reducing the hot water temperature.
- Installing a timer on your water heater to reduce energy used to keep water in the tank hot overnight.
- Establishing a startup and shutdown schedule for appliances in your business.

Lowering the thermostat on your water heater by 10°F can save you between 3%-5% in energy costs, annually. Most water heaters are shipped from the manufacturer with higher-than-needed temperature settings. You can easily set the temperature of your water heater to 120°F, or even 115°F, without compromising comfort or convenience.

Transportation
One of the most significant forms of energy use in the United States is related to the transportation of people and goods. Some simple efficiency improvements may include:

- Maintaining vehicles to ensure fuel-efficiency and low pollution emissions.
- Planning deliveries to reduce the number of trips.
- Encouraging use of public transportation and carpooling by your employees.
- Providing secure bicycle parking facilities.
- Exploring telecommuting options.

National Energy Conservation Partners and Resources

- Eco-Efficiency Centre – [www.eco-efficiency.dal.ca](http://www.eco-efficiency.dal.ca)
- ENERGY STAR – [www.energystar.gov](http://www.energystar.gov)

Local Energy Conservation Partners and Resources

- Avista Utilities – [www.avistautilities.com](http://www.avistautilities.com)
- SMART Business Recognition Program – [www.developingspokane.org/incentives/green_incentive](http://www.developingspokane.org/incentives/green_incentive)
- Spokane Neighborhood Economic Development Alliance SNEDA – [www.snedagreen.com](http://www.snedagreen.com)
- Spokane Neighborhood Action Programs (SNAP) – [www.snapwa.org](http://www.snapwa.org)
- Spokane Transit Authority – [www.spokanetransit.com](http://www.spokanetransit.com)
- Sustainable Local Investment Partnership (SLIP) – [Jim Wavada (509) 358-7894](http://www.solidwaste.org)
- Waste Reduction Assistance Program (WRAP) – [www.solidwaste.org](http://www.solidwaste.org)

ENERGY STAR Suggested Settings - Thermostat

<table>
<thead>
<tr>
<th>Time</th>
<th>Setpoint Temperature (Heat)</th>
<th>Setpoint Temperature (Cool)</th>
</tr>
</thead>
<tbody>
<tr>
<td>6:00 a.m.</td>
<td>≤ 70° F</td>
<td>≥ 78° F</td>
</tr>
<tr>
<td>8:00 a.m.</td>
<td>Setback at least 8° F</td>
<td>Setup at least 7° F</td>
</tr>
<tr>
<td>6:00 p.m.</td>
<td>≤ 70° F</td>
<td>≥ 78° F</td>
</tr>
<tr>
<td>10:00 p.m.</td>
<td>Setback at least 8° F</td>
<td>Setup at least 4° F</td>
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</tbody>
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Last updated April 10, 2009