



# Ernie's Energy Saving Tips for Small Businesses

**INCREASE** energy efficiency, **IMPROVE** your image, **BOOST** your profits!

Small businesses typically spend 30% more of their operating costs on energy than large firms in the same industrial classification. Energy is seen as "the cost of doing business" but those "fixed" costs can often be reduced. Even simple changes in operations can result in big savings. **Energy efficiency helps improve your businesses' cash flow and bottom line.**

## LITTLE CHANGES MEAN BIG SAVINGS!

- ➔ **Set it back.** Install a programmable thermostat. When no one is in the building, (typically eight or more hours/day) it can adjust the temperature 10° - 15° F (cooler in the winter and warmer in the summer) to reduce energy bills by more than 10%.
- ➔ **Turn it off.** "Phantom" loads are power used keeping equipment in the "ready" mode. Use power strips to completely shut down energy consumption of equipment that is not in use. **Bonus tip:** Digital equipment (computers, microwaves) uses 75% of its energy in "stand-by" mode. If it has a "black box" plug it is using energy even when in the "off" mode.
- ➔ **Conserve water.** Install aerators and low-flow devices. **Remember** wasting hot water wastes energy used to heat the water. Make sure your water heater is not set above 120° F and insulate the tank and pipes.
- ➔ **Keep your peak demand low.** Utility companies charge more for energy used during peak demand hours, usually 8-5. If a business uses significant energy during peak demand hours, it is possible to reduce those fees simply by moving some operations to off-peak hours. Equipment controls can also lower peak charges by automatically leveling out start up current usage, shutting down idle equipment, and adjusting temperature, speed, or other settings to use less energy. **Bonus tip:** Check with your utility company to find out what their peak demand hours are.
- ➔ **Tighten your building envelope.** Plug or fill cracks or leaks with caulking and weather stripping. Typically there are gaps around windows, doors and utility switches/outlets.

## Start with an audit



An energy audit is an excellent way to learn about your current energy usage and identify efficiency options. An audit may be offered FREE by your utility company. For a listing of professional energy auditors visit the EAC website at [missouribusiness.net/eac/energy-renewables](http://missouribusiness.net/eac/energy-renewables).



### Discover Your Payback and Savings \$\$\$

ENERGY STAR's Cash Flow Opportunity (CFO) Analyzer is an excellent tool to calculate payback on your energy efficiency investments and answer critical questions such as:

- ? How much new energy efficiency equipment can be purchased from anticipated savings?
- ? Should this equipment purchase be financed now, or is it better to wait and use cash from a future budget?

**TRY IT OUT -- [missouribusiness.net/eac/energy-renewables](http://missouribusiness.net/eac/energy-renewables)**

## REMODEL + ENERGY EFFICIENCY = customer appreciation

Improve your business image while reducing overhead. Refresh your space with new lighting--customers will notice! When you remodel, incorporate the latest energy efficient windows, doors, Energy Star appliances, and other efficient products. Let customers know you are taking steps to save energy as part of your commitment to sustainable operations. They can feel good about doing business with you.



## Smart Investments

- ➔ **Convert to energy efficient lighting.** Use T-8 or T-5 tubular fluorescents in overhead fixtures and save 35% on energy use. Replace incandescent bulbs with CFL bulbs and save 75% of the energy for the same light output. Newer CFLs are even dimmable. Savings can also be achieved by installing occupancy sensors in spaces such as rest rooms, storage rooms, conference rooms and private offices. **Bonus tip:** Conventional exit signs could be costing you up to \$28/year per fixture in electricity! Switch to modern LED exit signs which operate for \$4/year and last ten years.
- ➔ **Purchase ENERGY STAR Qualified Products.** Typically ENERGY STAR office equipment saves more than 50% of power used by other equipment. **Bonus tip:** Laptops use less power than desktop computers. Inkjet printers use less energy than laser printers.
- ➔ **Upgrade you HVAC unit.** If your HVAC unit is more than ten years old, it may be costing you up to \$200 extra per year in energy costs. Keep that money in the bank by replacing the old unit with an ENERGY STAR qualified unit. Also, installing and using ceiling fans can reduce air conditioning 3-5 degrees in the summer. Reverse the direction of the ceiling fans in the winter to push the warm air down. **Bonus tip:** Check [missouribusiness.net/eac/energy-renewables](http://missouribusiness.net/eac/energy-renewables) to see if you can take advantage of tax credits.
- ➔ **Retrofit your building.** Stop infiltration of outside air into your building and start saving. Tighten and insulate your building envelope, which includes the walls, windows, outside doors, foundation, floor, roof and skylights. ENERGY STAR estimates that tightening a building's envelope can result in 20% energy savings. **Bonus tip:** Visit the DSIRE database at [missouribusiness.net/eac/energy-renewables](http://missouribusiness.net/eac/energy-renewables)



from **Dirty** equipment!

Equipment maintenance is one of the easiest and most cost effective ways to decrease energy use and stop wasting your green!

### Every year...

**Tune up your HVAC.** Just as a tune-up for your car can improve your gas mileage and increase longevity of the auto, a yearly tune-up of your heating and cooling system can improve efficiency and comfort.

### Twice every year...

**Clean lighting fixtures, lamps and lenses.** Maintenance is vital to lighting efficiency. Light levels decrease over time because of aging lamps and dirt on fixtures, lamps, and room surfaces. Together, these factors can reduce total illumination by 50% or more, while lights continue drawing full power.

### Every three months...

**Change your air filters.** A dirty filter slows down air flow and makes the system work harder to keep you warm or cool -- wasting energy.

**more INFO**

ENERGY STAR Financial Evaluation Tools — [energystar.gov/buildings/tools-and-resources/financial-resources](http://energystar.gov/buildings/tools-and-resources/financial-resources)  
ENERGY STAR Heating and Cooling Efficiency — [energystar.gov/index.cfm?c=heat\\_cool\\_pr\\_hvac](http://energystar.gov/index.cfm?c=heat_cool_pr_hvac)  
Business Savings and Rebates KCP&L — [kcpl.com/save-energy-and-money/for-business/business-rebates/mo](http://kcpl.com/save-energy-and-money/for-business/business-rebates/mo)  
Free Commercial Energy Audits, City Utilities of Springfield — [cityutilities.net/conserves/pgm-comaudit.htm](http://cityutilities.net/conserves/pgm-comaudit.htm)  
Free Commercial Energy Audits, Columbia Water and Light — [gocolumbiamo.com/WaterandLight/Home/audit.php](http://gocolumbiamo.com/WaterandLight/Home/audit.php)  
Missouri Industrial Assessment Center — [iac.missouri.edu](http://iac.missouri.edu)  
University of Missouri Extension Pollution Prevention Intern Program — [missouribusiness.net/eac](http://missouribusiness.net/eac)

- ➔ **Contact Paul Bateson, Missouri Environmental Assistance Center, at 573-882-9976 or [batesonp@missouri.edu](mailto:batesonp@missouri.edu)**

