

Energy Tips

The following are some tips on reducing your energy consumption. For more information, or if you would like to discuss any energy issue, please call Joel Zook at 239-5177, or send an e-mail.

HEATING

- Clean or replace filters regularly on gas furnaces and electric heat pumps; keep the outside units free from leaves or debris that may clog vents. Clean, free-flowing air is necessary for efficient combustion in the furnace and proper heat exchange for the heat pump.
- Program a clock thermostat for automatic energy savings. Try 68°F during the day and 60°F at night while you sleep.
- Seal ducts so more heat gets where you want it to go.
- Close your blinds and drapes at night in the winter to keep the cold out. Open them in the daytime if you can gain heat from the sun.
- If you plan to buy a new furnace, select an energy-efficient unit. Your contractor has energy fact sheets for each model; ask for them and compare energy usage. All gas furnaces have an annual fuel utilization efficiency (AFUE) rating. The higher the AFUE, the more efficient.
- Keep your heating system well tuned with periodic maintenance by a professional service person.
- Keep your fireplace damper closed unless you have a fire going. An open damper in a 48-inch square fireplace can allow a heat loss of up to 8% through the chimney.
- When your heating system is on, keep windows near your thermostat tightly closed. Unnecessary drafts will keep your furnace working after the rest of the room has reached a comfortable temperature.
- Keep warm air registers clean and free of obstructions, such as furniture, carpets, and drapes.
- You can save 1%–2% on your energy bills by using foam gaskets on all exterior outlets and switches.
- You can save 2%–5% of the energy needed to heat your water by installing an insulated water heater jacket.
- Water-saving showerheads, faucet aerators, hot water pipe insulation, and a hot water temperature reduction can save up to 50% on water heating energy.
- Air leakage can account for 30%–40% of your heating bill. The average American home loses \$150 worth of energy per year through air leaks in its ceiling, walls, and foundation. Caulk, weather-strip, and plug any holes to the outside.
- A 5° set back on your thermostat can save up to 12% of your heating.
- Don't forget to seal and insulate your room air conditioner if you leave it installed for the winter.
- Only use bathroom and range hood fans when necessary. They create a suction that pulls in outdoor air.
- Drain a bucket of water out of your water heater at least once a year to reduce sediment and help with efficient operation. It is important to allow proper heat transfer to the water. Sediment will reduce this transfer and lower efficiency.

COOLING

- Clean or replace filters regularly. Clean, free-flowing air is necessary for efficient operation.
- You can save 1%–2% on your energy bills by using foam gaskets on all exterior outlets and switches.
- The average American home loses \$150 worth of energy per year through air leaks in its ceiling, walls, and foundation.
- Adding insulation to your home can cut your cooling costs up to 25%.

- A 5° set ahead on your thermostat can save up to 10% of your cooling energy.
- Clean your outdoor compressor unit each spring, and make sure it is not blocked with debris.
- Seal ducts so more cool air gets where you want it to go.
- Keep your registers free of obstructions such as furniture, rugs, and drapes, so your cool air can do its job.
- Close your blinds and drapes to block out the heating rays of the sun.
- If you plan to buy a new air conditioner, select an energy-efficient unit. Your contractor has energy fact sheets for each model; ask for them and compare energy usage. All air conditioners have a seasonal energy efficiency rating (SEER). The higher the SEER, the more efficient.
- Keep your cooling system well tuned with periodic maintenance by a professional service person.

BUILDING ENVELOPE

- Caulk and weather-strip doors and windows that leak air.
- Look for air leaks through openings where plumbing, electrical wiring, or cables go through walls, floors, and ceilings. Check for drafts from electrical outlets, around ceiling fixtures, and at openings to the attic. Seal cracks and holes that you find. Avoid using fiberglass insulation to plug holes. Fiberglass allows air to pass. Use foam or caulk.
- Windows and doors account for about 15% of home air leakage. Holes into the attic, and the top of the foundation are the largest sources.
- Adding insulation to your home can cut your heating and cooling costs up to 45%. Adequate insulation will keep your home warmer in the winter and cooler in the summer. It pays to insulate your attic if you currently have a level of 6" or less. Raise it to 12"–14".
- Don't let cold air seep into your home through the attic access door. Check the door to make sure it is well insulated and weather-stripped.
- When shopping for windows, use the energy performance labels developed by the National Fenestration Rating Council (NFRC)—many windows on the market carry them—as your guide to selecting energy-efficient units. Look for double pane argon gas filled windows or better.

HOME ENERGY AUDITS

- Conduct a simple do-it-yourself energy audit of your home or office to pinpoint where energy is being lost. Perform an on-line energy audit for information on how your building performs and the impact of making changes. Call your utility company or go to <http://hes.lbl.gov> for an audit.

APPLIANCES

- Keep burner reflectors, burner tips, and bottoms of pans clean to assure maximum range efficiency.
- Use only the minimum amount of water necessary when cooking food. Use pressure cookers when possible.
- Match pan size to burner size, and cover pans with lids when possible.
- Run only full loads when cleaning dishes or washing clothes.
- Try cold water for washing. Today's detergents work effectively in cold water. Always rinse in cold water. Warm water rinsing does not get clothes any cleaner.
- Select the correct water level for wash loads. Don't overfill.
- Use a dishwasher booster heater, and turn your water heater temperature down.
- Clean dryer lint filters after each load.
- Dry clothes outside whenever possible.

LIGHTING

- Turn them off if you are not using them.
- Replace your incandescent light bulbs with compact fluorescent bulbs (CFB). A 15 watt CFB provides as much light as a 60 watt incandescent bulb and saves you 75%.
- Use task lighting rather than lighting up an entire room.
- Light room colors allow you to get more use out of less light.
- Make use of natural day lighting whenever possible.
- Keep your exterior lights on a timer or a motion sensor rather than keeping them on all night.
- Use occupancy sensors to automatically turn your lights on when someone enters a room. The lights will go out when the room is empty.

GENERAL

- Heating and cooling account for 44% of your energy dollars.
- Lighting and kitchen appliances account for 33% of your energy dollars.
- Water heating accounts for 14% of your energy dollars.
- Refrigeration accounts for 9% of your energy dollars.
- Always look for the Energy Guide on new appliances. Buy EnergyStar® models to save.
- Appoint an energy manager in your home. Help children learn to become energy conscious.

EDUCATION

- Keep yourself informed on efficiency and how to manage your energy year round. Avoid thinking about energy only at crisis times. Developing good energy management habits will help improve the environment, contribute to keeping rates low, lower energy bills, and improve personal comfort. Watch for information on Power Watch from the City of Ames Electric Services.
- Call the Energy Services Coordinator at 239-5177, or send questions by e-mail to joel.zook@cityofames.org.