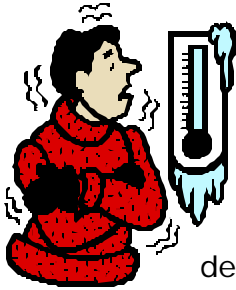


October 2005

## MANAGE ENERGY – SAVE OUR ENVIRONMENT



The heaters are on – whether using natural gas, electricity, or any other fuel, the cost to keep warm is here. If you had a chance to compare your 2004 to 2005 heating bill, you might notice a dramatic increase to your supply rate per cubic meter of natural gas used. Depending on your location, consumption, and your contract, your bill could be as much as 25% higher. It does not stop here. A key target in our province's Energy Conservation is to reduce the electricity demand by 5% by 2007. One of the initiatives to attain this goal is to move towards full-cost pricing of electricity, which could mean a continuous climb of energy cost.

While we can not directly influence the heating costs per cubic meter or kWh, we can do something about how energy is used inside our buildings. This does not mean putting on our jackets and turning the heaters off. This means that we are aware of our actions in using the energy more efficiently. By using energy efficiently, our buildings will need less energy to warm – one way and the biggest way to save energy.

Here's a data from the Natural Resources Canada and Statistics Canada, Office of Energy Efficiency:

How energy is used in Ontario homes*		For an annual energy bill of \$2,000**
Space heating	57-62%	\$1,140 - \$1,240
Water heating	20-21%	\$400 - \$420
Appliances	12-13%	\$240 - \$260
Lighting	4-5%	\$80 - \$100
Cooling	0-7%	\$0 - \$200

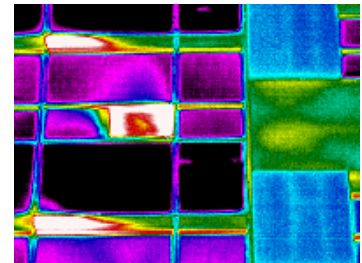
\* Many factors can affect your annual energy bill, such as size and location of your home, yearly variations in weather, efficiency of your furnace and other appliances, thermostat settings, number of occupants and the local cost of energy.



How do these percentages compare to your own buildings? Probably not much different. The lower the temperature outside, the more energy is needed to keep warm, even at a pre-set inside temperature of 23 C. So space heating percentage could easily be higher than 62%.

IRIS Thermography quite often gives presentations about Compressed Air Leak Survey. Industries producing compressed air usually use it to clean parts, to run equipments and machineries, or they need it as part of their process. Over time, the air lines get rusted which cause pinholes, the fittings get broken or loosened, or the equipments failed such that the compressed air is now leaking back to the atmosphere instead of being used to its intended purpose. The cost of electricity to run the compressors, the maintenance of the compressor, the lubricants, grease, motors, bearings, etc. associated in making that compressed air is wasted. Our message to industries in this situation is to find and locate air leaks so they can be fixed and the compressed air is not wasted. We even provide Air Leak Survey complete with consumption, location, and dollars report to them to help them manage energy.

Bring the same scenario to our buildings. Instead of air lines, we have a multi-sided building, and instead of fittings, we have windows, doors, walls, and roof. Any of these areas is an opportunity for heat leakage or heat loss. Instead of Compressed Air Leak Survey, we will do a Building Envelope and Roof Moisture Inspection. We will scan all the walls, windows, doors, roofs for any cracks, insulation thinning, or cavities that will let heat escape to the outside or let moisture from the outside get inside the building. The complete report will give you digital and infrared pictures, the condition of the problem and what needs to be repaired immediately. Some of our customers use our report as a basis of comparison. How does this roof look like now compared to a year ago?



The bottom line is the bottom line. Are we able to run our business properly and efficiently so we can stay in business for a long time? How about the higher good? Are we able to manage our energy consumptions better so we can keep our environment cleaner, better, and more livable for future human generations? Eliminating energy waste is certainly a big factor that will take us there and therefore worth our serious consideration.

For more information or any questions, please do not hesitate to contact us. We would love to hear from you.

By: Liane Emata-Harris, BSChE, MSE  
Director, Sales and Customer Support  
[www.iris-thermography.com](http://www.iris-thermography.com)  
E-mail: [IrisSolutions@sympatico.ca](mailto:IrisSolutions@sympatico.ca)