## up-to-Code: Reduce Your Energy Bill

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We have all been learning to cope with the higher cost of petroleum for our vehicles but here comes the Minnesota winter. The predictions for heating costs suggest as much as a 75% increase over last season. With those numbers, the cost of improving your buildings has never looked more affordable.

An analysis of your buildings can easily calculate the payback for improvements and we can even use a hand held camera to visually find leaks and cold spots where corrections can be helpful. Increasing insulation, adding weatherstripping, replacing caulk and adding wind barriers are simple ways to improve your facilities.

In addition to these passive methods, there are also some "active" methods to conserve energy. The active systems have, in the past, been too costly to attract wide acceptance but with the advances in technology and the skyrocketing energy costs, they will become more and more common.

One fairly simple active system is the heat exchanger. This device is added to an exhaust vent or drain line and captures heat from the discharge to pre-heat incoming air or water. Depending on the application, this simple device can make a noticeable impact.

Another active system that we have utilized is even more comprehensive. A small power generator can significantly reduce your electric and heating costs. The generator and controls allow you to avoid high electric rates by remaining offpeak. By running on either propane or diesel you also qualify for energy rebates for "dual fuel" reducing

your rates for natural gas even further. Heat captured from the generator's cooling system can also provide significant heat for a heat exchanger for your furnace or water heater. The energy savings are significant and you also gain the advantage of being able to go "off-the-grid" to operate your facility when the power systems fail.

These active systems can qualify for cash rebates or credits from the power company. They appear costly at first but when you consider the increasing energy costs, they look better and better all the time and are definitely worth considering.

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