

Buildings use a lot of energy: over one-third of all primary energy and two thirds of all electricity. Since natural gas and electricity represent a significant proportion of a building's operating costs, using less of them will save money. At the same time, using less energy helps to protect the environment.

For both reasons, saving money and helping to maintain a healthy environment, Tridel is committed to developing condominium communities that require less energy to run – without sacrificing any of the comforts or conveniences that make our condominiums attractive to homebuyers in the GTA.

Conservation vs Efficiency

For many people, using less energy simply translates into using less of the things that require energy. Tridel, however, wants condo owners to live comfortably and to enjoy the conveniences and services that they work hard to achieve. Our approach to saving energy is based on the principal of efficiency.

Shutting off the lights and turning on less equipment is your business. That's energy conservation and it is an important virtue that society applauds. Tridel even offers energy management systems and homeowner recommendations to help energy or cost conscious residents conserve energy (see below and also Tridel's website). However, our business, as developers, is to ensure that the equipment in your suite and in your building operates as efficiently as possible. We want to make sure that what you turn on uses less energy. This is what we mean by energy efficiency.

Controlling Maintenance Costs

There are two types of costs in a condominium: common charges for those services and expenses that pertain to the common areas in the building; and private, in-suite utility and service charges.

Tridel's analysis of existing buildings indicates that utility costs – gas, electricity and water charges – amount to roughly 40% of the common charges assessed to individual homeowners by the Condominium Corporation. This percentage reflects the rising costs of water and energy, a trend that is sure to continue.

With regard to in-suite energy use, Tridel helps residents control costs by installing energy efficient lighting, appliances and sub-meters.

Appliances

All of the major currently eligible appliances in a Tridel condo are Energy Star™ rated. This means that Tridel condo owners will save on energy costs AND water consumption. Front load washers use roughly two-thirds less electricity and one-third less water. Plus their spin cycles withdraw more water from the clothes, reducing dryer use. The average savings from the clothes washer, refrigerator and dishwasher are expected to be over 30%. This is good news if electricity rates climb as expected during the lifespan of these products.

Heating & Cooling

Canada is a heating dominated climate, so the selection of heating equipment is essential when it comes to controlling costs. Tridel specifies high efficiency modulating boilers (or in some cases condensing boilers) to maximize rated efficiencies as well as operating efficiencies. Energy efficient cooling equipment is also specified for all Tridel projects.

Envelope

Tridel minimizes heat loss by insulating and sealing the building envelope and reducing thermal bridging between the building's exterior surfaces and a suite's interior space. Double glazed windows also ensure additional comfort and insulation.



Ventilation

Ventilation accounts for a large percentage of the energy used in a condominium building. This is because large volumes of outside air are pumped into the building and into the suites in order to provide adequate fresh air and to support a comfortable and healthy living environment. However, all of that outside air has to be conditioned, a costly requirement during periods of extreme outdoor temperatures. Unfortunately, until recently, all of that conditioned air was exhausted from the building through bathroom fans, kitchen rangehoods, dryers and open windows.

Now, thanks to an extensive research and development effort and the cooperation of forward thinking manufacturers, Tridel will be installing heat recovery ventilators on our buildings' air handling systems. Buildings with heat recovery systems will still exhaust stale air directly, but will use heat exchanger technology to pre-condition fresh outside air with the outgoing air (without mixing the two air streams). This will significantly reduce the amount of energy required to condition the outside air without sacrificing any of the comforts.

Metering

Placing sub-meters in every dwelling allows the Condominium Corporation or a service company to allocate costs based on consumption. Tridel installs electricity meters at every suite, so residents will only pay for the electricity they use. Residents who use less electricity, in other words, will have lower electricity bills than residents who use more. Tridel is now introducing thermal meters to measure the amount of heating and cooling and hot water used in individual residences.

Lighting

Lighting for corridors, lobbies and stairwells is on all of the time. Installing the most advanced energy efficient lighting, like compact fluorescents will save the condominium money, especially during peak load periods.

What can you do?

As Canada's leading builder of condominiums, Tridel takes very seriously our responsibility to deliver high performance buildings that are energy efficient and will assist residents to manage costs. However, a lot depends on how a building's residents use energy. Here are a couple of recommendations:

- Replace old lightbulbs with compact fluorescents or other highly efficient lighting products.
- Run appliances during off peak periods (look for the 4-hour time delay on your dishwasher).
- Engage an energy management company to look after the scheduling and monitoring of your building's major systems, like heating, cooling and air handling equipment.
- Turn off lights when you are not home, and use your thermostat to adjust temperatures for when you are home and away.

For more tips on what you can do, visit the Tridel website at tridel.com