Tapping into nature's heat

• More condominiums are taking advantage of renewable energy sources



Condominiums in Canada can realize big benefits from advanced green technologies that for many years, have been in regular use in highrise buildings in countries around the world.

As the trend continues, we will see more extensive use of renewable energy sources on condos and multi-unit dwellings.

Three types of renewable energy sources may be found in use at residential buildings.

Solar Electric is a system that uses arrays of solar panels on rooftops to convert sunlight into electricity. This produces clean power for the building and the excess may be sold back to the power grid under Ontario's new feed-in tariff

program.

Geothermal heating systems are increasingly popular, because of their relative ease to install. Holes are drilled into the ground to extract heat retained within the earth.

Solar Thermal heaters are also used in multi-unit buildings to augment the domestic hot water supply.

Solar panels on the building roof transfer heat to a hot water tank that supplies hot water to the building's boiler.

These remarkable technologies have such obvious advantages. So why don't all condominiums have renewable energy sources?

Well for one thing, it's harder for a condo corporation to finance these initiatives. In Toronto it's the co-operatives that lead the way. Under a different set of provincial laws than condos, the co-ops have more flexibility to invest in these types of systems.

Tim Grant and David Booz have been aware of this for some time. They cofounded the Downtown West Solar Energy Project, one of 13 community solar initiatives across southern Ontario.

Now they're holding meetings with condo owners, developers, and other stakeholders as part of the Tower Power Toronto initiative.

"The current condo act says that reserve funds that everybody pays into, cannot be used to do anything but strictly replace what's already there." says Grant.

He believes that the law needs to be changed to provide an incentive for builders and condo corporations to install the systems.

Despite this, there still

Lettting the sun in

Windward Co-operative at Bathurst and Queen's Quay were early adopters of the solar thermal technology.

 Windward residents now enjoy the solar water heating system that was installed in 2009 on the tower and townhouses

are many incentives in the form of provincial grants and Toronto Hydro's new financial program for multiunit residential towers to encourage and support the implementation of energy efficient projects.

Although most current energy systems in Toronto are retrofits, installed by condo boards after the fact, many builders are now realizing the advantages of sustainable energy systems ► Tim Grant, left, and David Booz co-founded the Downto West Solar Energy Project, one of 13 community solar initiatives across southern Ontario.

and are including them as part of the initial building construction.

Breaking ground on July 13, Ironstone Condominiums by Davies Smith Developments will be one of the first multi-residential highrises in Canada equipped with geothermal technology, that will service all of the building's space heating and cooling load requirements

