

Here comes the sun

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An entire residential development to be built south of Saskatoon will be powered by the sun.

The eco-friendly community, called Suncastle Park, will feature seven homes designed to harness solar energy to power the electrical, heat and hot water needs. The bright idea is the brainchild of Angie Ortlepp, owner of Pike Lake-based Suncatcher Solar Homes.

"This is the first of its kind in the province," she said. "A lot of people are talking about building

passive solar communities, but nobody is actually doing what we are doing."



*CREDIT: Gord Waldner, The StarPhoenix
Angie Ortlepp is introducing
Saskatchewan's first grid-tied solar
development. Named Sandcastle Park
and located 30 km south of Saskatoon,
the seven homes on the site will draw
their electrical and heating supply from
solar panels, with SaskPower providing*

The concept behind passive solar energy is to literally let the sun do the work. Houses are oriented to the south with rooftop panels and a wall of windows that enable a thermal mass such as a concrete floor or stone wall to absorb heat during the day and radiate it at night.

It's a big step designed to leave a tiny carbon footprint. The idea is to live as natural with the environment as possible, which means no bulldozing the rolling hills, wild brush and hollows of the natural prairie landscape.

"We want to work with the land, which provides lots of opportunity for walkout basements," said Ortlepp, whose company earlier this year installed one of the country's largest solar hot water systems in the Confederation Inn.

That system is predicted to save energy costs of \$300,000 over 25 years and reduce carbon emissions by 29 tonnes during that time.

Located adjacent to Pike Lake Provincial Park, Suncastle Park's lot sizes vary from 1.06 acres to 1.78 acres with prices ranging from \$104,000 to \$143,000. Included with each lot is an installed, two-kilowatt solar power system that provides enough power to run all standard kitchen appliances and entertainment units.

The system can be expanded to include more solar panels, wind turbines or geothermal energy, said Ortlepp.

The lots will still be tied into the SaskPower grid as a backup. On a sunny day, the solar panels will produce more electricity than is required, so the extra power will flow back into the grid, making the electrical meter run backward.

At night or on cloudy days, SaskPower will supply the electrical needs of the home. The homeowner will pay only for the difference between the power supplied by SaskPower and the

power produced by the solar panels.

Residents of Suncastle Park will also benefit from a rebate provided by the Saskatchewan government for grid-tied renewable power systems. After the home is complete and the solar power system installed, a cheque of about \$6,000, which represents 25 per cent of the value of the system, will be mailed out.

"Grid-tied solar and wind power systems benefit everyone," said Ortlepp. "They benefit you because you are saving on your energy bills and they benefit others because you are making clean renewable power available to everyone who is connected to the grid.

"If everyone had solar panels on their roof we would need fewer central power stations. Suncastle Park is our contribution . . . towards making Saskatchewan a cleaner, brighter place to live."

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