

Inglewood Light and Power

Posted By [valerie](#) On March 24, 2011 @ 8:18 am In [The Current Issue](#) | [No Comments](#)

Solar panels cover the rooftop at the Riverdale Fitness Mill, generating 200 kilowatts of power.

by Jeff Rollings

It's an elegant old lady, decked out in a fancy hat.

Inglewood's Riverdale Woolen Mill – these days perhaps better known as the [Riverdale Fitness Centre](#) – has seen a lot of different uses since Thomas Corbett first established a business on the site along the banks of the Credit River in 1841.

The Riverdale Woolen Mill has been owned by the Graham family for six generations

While there have been a lot of changes, and a couple of fires, there has also been at least one remarkable constant: the property has now been owned by the Graham family for six generations. In recent decades, it was the home of a family business: manufacturing fibreglass reinforced panels. Though the business was sold and manufacturing moved to Mexico, three-quarters of the floor space is still used as a warehouse and distribution point, leaving room for the gym.

Keeping up with the times, Riverdale is currently in the process of installing a roof-mounted solar array atop their 56,000 square feet of buildings, though there's certainly nothing new about renewable power generation at the site.

For decades the mill was powered by a water wheel in the nearby river. Early in the depression this was connected to a generator that supplied the community of Inglewood with all of its electricity. That came to an end in the early 1950s, when Ontario Hydro took over power generation and established Alternating Current, or AC power, as the standard. The mill generated Direct Current, or DC power. At the time, the water wheel was in need of major repair, so rather than upgrading the equipment it was simply shut down.

Solar panels cover the rooftop at the Riverdale Fitness Mill, generating 200 kilowatts of power.

Flash forward to 2011 and Riverdale is getting back into renewable power generation in a big way, though this time from the sun, not the river.

Their system comprises 800 solar panels generating 200 kilowatts, or enough power for an estimated 162 houses. While the installation is not yet complete, and final numbers haven't been tallied, owner Dave Robertson (his mother was a Graham) says the capital cost will be "well in excess of a million dollars." He expects the pay-back period to be about ten years.

Riverdale submitted its application under the province's FIT (Feed-in Tariff) program in May of 2010, after a careful business planning exercise. Along the way, Robertson has gained some practical insights about the ins and outs of renewable energy generation.

Of the seemingly generous rates paid by the province under the FIT contract for roof-mounted solar systems, Robertson explains that it's not quite as over-the-top as it first appears.

First, he points out that all of the capital cost is subject to the 13-per-cent Harmonized Sales Tax, providing an immediate source of government revenue. On a million dollars, for example, that's \$130,000.

Beyond that, there's the ongoing revenue from operation of the system itself, all of which is taxable income. "So maybe a third of that money goes straight back to the government too." And another factor: the development of electrical generating capacity has always been funded by the public purse. "But now, all the capital investment is private dollars," Robertson says.

Riverdale has also dealt with the reluctance of banks to provide project financing. One dubious banker even asked, "What if there's no sun?" Robertson responded: "Well, then we'll all be dead."

Looking long-term, Robertson sees his system becoming very valuable after "peak oil," when energy prices are expected to skyrocket. In a true case of everything-old-is-new-again, he imagines the possibility of some day taking the facility off the grid and running his own "Inglewood Light and Power."

Nearing completion, the Riverdale project finds itself among a growing number of solar entrepreneurs who, despite having made a huge investment, have now been told to expect a delay before they can be hooked up to the grid. However, Robertson remains optimistic it can be sorted out, at least in part because the mill's industrial background means it already has a heavy-duty, on-site electrical infrastructure.

Robertson's renewable energy dreams don't stop there. He also has his eye on the river, pondering what it might take to bring water power back to the mill. Perhaps one day soon the Grahams and their water wheel will be reunited.

Jeff Rollings is a writer in Orangeville.

More related to this article:

[LET THE SUN SHINE IN, Solar energy gets personal](#)

by Phyllis Robinson

[CATCHING A FEW RAYS, Local initiatives cash in on the sun](#)

by Jeff Rollings

Article printed from In the Hills: <http://www.inthehills.ca>

URL to article: <http://www.inthehills.ca/current/inglewood-light-and-power/>

By Matthew Strader, Enterprise Staff

The bell hasn't rung for Inglewood power in more than 50 years.

On May 27, that bell might ring again.

Up until 1956 a water wheel at the Inglewood Mill supplied power to the quaint town on the old rail line. At 7 a.m. everyday, the bell tower would sound its chimes, the water would begin to flow, the wheel would spin the horizontal turbine, and power would be produced. At 7 p.m., the bell would sound again, and the wheel would stop.

In 1956, the wheel stopped permanently, tells owner Dave Robertson.

"It broke, and it just never started again," he said. "But I've been dreaming about Inglewood light and power for 30 years. It's the realization of that dream. We may have to ring that bell once again."

Beginning last May, contractors began to turn the roof of Riverdale Mill into a modest solar power facility. From replacing wood on the roof, to installing wiring and electrical infrastructure, the Inglewood Mill has been a hive of power generating activity. On May 27, that bell might ring again, because the mill will once again begin producing power.

"It's taken the whole year to put the whole thing together," said Robertson. "And it's been one incredible ride."

The mill now houses 800 high efficiency solar panels that will, for four peak hours each day, produce enough electricity to power 162 houses in Inglewood.

"Roughly half of the village," said Robertson.

The system is connected directly to the power grid, with no storage capacity and no batteries. When the sun is down, the grid will fill in the holes, and when the sun is up, Inglewood light and power will contribute a much more environmentally conscious solution.

Holding three degrees in Natural Resource Management, and being an environmentally responsible person, Robertson wanted to do something to make a difference. Something substantial.

"We know we've got to change our attitude, our consumptive mindset has to change. This is our big effort to do that."

His dream was to see the mill that he now helps to take care of produce again.

The fiberglass that used to be produced by the Graham/Robertson families isn't anymore. "Now, we basically just lease the space," Robertson added

"But a mill is designed to make things, to do things," he said. "And we still have the industrial designation. Our business plan now is geared toward social, responsible outlets. We have the gym, and now, we have environmentally friendly power generation."

The \$1.7 million project consisted of almost a year of labour, 278,000 pounds of hand removed roof material, 42,000 pounds of that material replaced and three miles of wire. All of the used material was recycled in an environmentally friendly fashion. The family was also proud to keep approximately 70 per cent of the project, materials and work within the GTA. Supan Solar Solutions were utilized as a general contractor, and Canadian Global Solar were the installers.

"Both were excellent," said Robertson about the work.

The panels are silicone on a fiberglass background. Robertson is aware of the critiques of solar power. The composition of the materials is frequently criticized as being unfriendly waste and the power system itself is sometimes called inconsistent. Both, he said, are sacrifices one must accept for a better way of doing things.

"The panels are made from silicone on fiberglass, but they are generally inert," he said. "Sure, in the manufacturing there is a dependence still on carbon and oil based production, but the point is to reduce our dependence on it. For us, this is a big step toward that."

His belief is that the example the Riverdale Mill is setting by using its own private money to take on such a grandiose project will only inspire others.

"Private money is doing what the public purse used to do," Robertson said. "It is a social responsibility and if we global citizens ever get it, then the true costs of not doing anything will be catastrophic."

Now, the next stage in the business plan will be continuing to get the word out and show people just how that difference can be made.

One step, though, will be returning to the old ways, and ringing that bell once more.