

## Solar panels for an average house can cost as much as \$40,000.

Solar panels resemble awnings on the south face of the sideby-side duplex designed by architect Martin Liefhebber and built by Rolf Paloheimo in Toronto in 1996. Paloheimo sold one of the three-bedroom units and lives in the other.

upscale Caledon, not only do the inhabitants dislike the idea of living next to 30 families on a 77-hectare farm, they also wonder about the intentions of the Whole Village founders, who want to pursue such activities as biodynamic farming and ecologically responsible energy, water and waste systems.

In addition, Whole Village professes attitudes about sharing and consensus building that remind its neighbours of the sixties, and the last thing the property owners of Caledon want is a commune of hippies. "People are acculturated to private ownership," says Davies. "And most of us aren't into sharing stuff, especially financial sharing. It's a challenging concept."

The amount of money required for ecologically sound technology can also be daunting. Although it may pay for itself over time, it often costs more than standard building materials and appliances. And as Paloheimo points out, it may have little or no resale value. Solar panels for an average house,

for example, can cost as much as \$40,000, and it could take up to 100 years to recover the investment in energy savings.

The economics tend to dissuade private developers. Yet a few intrepid individuals have tried to incorporate some healthy-house concepts into an entire housing project, hoping to attract purchasers with a vague but uncommitted interest in preserving the planet. Instead of sharing the risk communally, these developers take the financial risk themselves and potentially reap the rewards if they can attract enough buyers.

S DEVELOPER AND PROMOTER of Hawthorn Hill in Mahone Bay, N.S., Ian Startup has sold nine single-home plots on an 18-hectare site that devotes six hectares to walking trails and green space. Startup's development emphasizes sustainable building materials, energy efficiency, low toxin levels and responsible land use. "We'll use linoleum (made with linseed oil and powdered cork) instead of carpeting or sheet vinyl," he says. In the house he built for himself, Startup has also used thin-coat plaster, which can be applied quickly and requires little or no painting, instead of drywall.

At \$115 per square foot, including the \$35,000 to \$46,000 cost of the land, an average single detached house in Hawthorn Hill will cost about \$230,000.

The development will also incorporate a communal dimension, although its approach to decision making does not resemble participatory democracy so much as enlightened dictatorship. Before Startup will sell a building lot, purchasers must agree to a three-page list of covenants that prohibit a variety of residential sins, including the construction of semi-detached, duplex or apartment housing, the use of a house for any purpose other than a private residence and overhead wires of any kind. In some cases, these covenants contradict

als are regarded as toxic waste. "All this limits your options," says Paloheimo, and home buyers want as many options as they can get. Furthermore, recycling water may make environmental sense, "but who wants to shower in water from the washing machine?"

For the same reasons, real estate in an ecovillage is not easy to resell. Buying a house is the most expensive purchase most people will ever make. It's an emotional commitment, fraught with anxiety and second-guessing. And few people want to spend additional money on such unfamiliar technology as biofilters and living waste-disposal systems if they can get a simple toilet that flushes and weekly garbage pickup at the curb.

## 'I'm a business owner, and I was used to making decisions by myself. I had to do a lot of letting go to be able to work in the group process.'

the principles of an ecovillage. Ecovillages emphasize self-sufficiency, for example, and encourage individuals to work at home or within the community. They provide a common space for meetings and recreation, and they emphasize self-sufficient services such as heat, power and lighting. They also welcome a diverse group of residents, accommodated within housing units that range from apartments to wheel-chair-accessible shared dwellings.

Startup will consider applications for home offices. The other options, however, were out of the question. "We considered the ecovillage approach," he acknowledges. "But my wife and I had to ask ourselves what kind of community we ourselves wanted to retire to. We didn't want to live in a commune. We didn't want to live in a retirement village. We wanted to live a normal life. But if people buy into this community, they will want to maintain the spirit of the covenants."

While it may seem a far cry from an ecovillage, Hawthorn Hill incorporates at least some of its features and is a radical departure from conventional development practices. And in the conservative world of building development, that constitutes a substantial risk. Before Startup could sell his first lot, local authorities required him to produce engineered plans and surveys, build sewer lines and a paved road, install power lines and poles, relocate the town's electrical-equipment storage facility and cover an abandoned gravel pit. They also asked him to build a medevac heliport, but he is still challenging that request. Over eight years, Startup figures he has invested almost \$500,000. Against those risks, even the most passionate idealism wears thin.

If Startup had incorporated such technologies as waste-water recycling systems and wind-power generators, he could have lost his shirt. "These are complex concepts," says healthy-house builder Paloheimo, and they're not easy to sell to the public. To collect passive solar energy, for example, a building's windows must face in the right direction. Recycling rainwater and reclaiming waste water require specific design modifications. And, in some cases, recycled building materi-

Paloheimo eventually sold one of his attached healthy houses in Toronto at its fair market value, but when he first put it on the market, a real estate agent told him that he'd have to provide a discount on the selling price, because "everything is so unusual."

None of this has stopped committed ecovillagers from pursuing their dreams. Whole Village members continue to hold meetings and to persuade their Caledon neighbours of their good intentions and potential contributions to the area and the world. In Vancouver, a development called Southeast False Creek is coming closer by the month to receiving construction approval. In Calgary, a development known as Eco-Village 1 will begin construction in two to three years. Smaller ecovillage projects dot the hypothetical landscape, particularly in British Columbia, many of them assisted by consultants like WindSong's Alan Carpenter.

"There's no question that it takes quite a shift in perception to be able to work together to create a common vision," Carpenter says. "For me, WindSong was a huge learning process. I'm a business owner, and I was used to making decisions by myself. I had to do a lot of letting go to be able to work in the group process. But the rewards for me and my work have been huge. And the resulting community is much more than I could have dreamed about by myself. There is more safety, more caring, more sense of place, more community, more support, and more consideration for the environment. It's a great place for seniors, singles, single parents and families. It makes less impact on the environment and improves people's health. In fact, people who live in ecovillages often say it's like the difference between being alive and dead."

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