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It Takes a Village

Eden Mills enlists U of G help in bid to become first carbon-neutral village in North America

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"I already know I have to say goodbye to my SUV." Call it part of the price of living in the first village in North America planning to go carbon neutral, says Linda Melnick, an 11-year resident of Eden Mills. But far from opposing that plan, the business and client services manager in U of G's Department of Athletics is working with a team of Guelph students whose course project is expected to play a key role in helping the village rein in its emissions of greenhouse gases.

As carbon footprints go, Eden Mills may appear dwarfed by the globe-tramping giants of Toronto, New York or, well, Guelph. But in the spirit of small steps towards a greener world — and with help from those students and U of G faculty — the roughly 350-strong village just outside Guelph hopes to become the first carbon-neutral village on the continent.

Referring to the project designed to allow the village to balance emissions and absorption of greenhouse gases that are believed to be warming the planet, Prof. Paul Sibley, Environmental Biology, says: "This really would be the first such initiative in North America."

Six students in his fourth-year environmental science project course are working with a local team to design and carry out a homeowners' survey. The survey, to be conducted door-to-door by the students next semester, is intended to gauge community support and yield estimates of the village's current carbon emissions and targets for the next five years. The students will write a report with recommendations by the spring.

"There's been quite a buzz around this," says Charles Simon, an architect and planner based in Eden Mills. He has helped lead the initiative along with his wife, Anna, and other residents — notably

Glenn and Libby Little, owners of a straw bale house designed by Simon — under the umbrella of the Eden Mills Millpond Conservation Association.

The project has already attracted media attention, including a CBC Radio segment and an article in the Toronto Star.

The Simons were inspired to launch the initiative after a visit last summer to Ashton Hayes, a village in England that is pursuing its own carbon-neutral goal.

The project was officially launched early this month during an event in the Eden Mills community hall that attracted an overflow crowd of residents, schoolchildren, community groups and U of G representatives.

“The participation was quite remarkable — the whole room was full,” says Ashley St. Hilaire, a fourth-year student in natural resources management. “People are engaged. We’re always waiting for someone to come up with a solution. This is taking that responsibility into our own hands.”

Says Sibley: “This is exactly the kind of project I thought would be ideal for students.”

Previously, students in his capstone course — actually a yoked pair of courses — have studied cost-benefits of ethanol as a gasoline additive, coal-bed methane mining in Alberta and streamside tree planting.

Simon says the students' work in Eden Mills will provide critical information about the size of the village's carbon footprint and how to reduce it by, say, cutting energy use, investigating “green” power or planting trees. He and his wife have used passive solar technologies and insulation to efficiently heat and cool their house, which is also home to his office.

“It was key to get the University of Guelph collaboration,” he says. “We’ll at least have a picture of our footprint.”

Sibley and other faculty will probably suggest specific projects designed to mitigate greenhouse gas emissions, such as growing biomass crops or using wind power as an alternative to burning fossil fuels. For example, Prof. Andy Gordon, Environmental Biology, has discussed how planting fast-growing trees such as poplars may help

the village with carbon sequestration (movement of carbon dioxide from the atmosphere into plant roots and soil).

What impact can a village of 350 people make on the global carbon scale?

Sibley acknowledges that replicating the village's example to, say, his 100,000-strong hometown of Waterloo would pose plenty of challenges. But he's optimistic about prospects for adapting the lessons and examples from Eden Mills to other communities. "This is providing proof of concept."

Besides driving a Honda Civic to work, he tries to reduce his own carbon footprint by paying special conference fees to offset carbon emissions for travel and accommodation at academic meetings. He says more conference organizers are providing "carbon calculators" to help delegates figure out carbon offsets. They can then pay a fee to be used for planting trees or other mitigation projects.

Transportation will be a key challenge for Eden Mills, says Simon, pointing to its lack of public transit. Villagers are considering car pooling or creating a trail to Rockwood. One resident is even thinking about setting up a food distribution business to make delivery more efficient.

Melnick expects she'll soon be driving to campus in a new hybrid vehicle. Now working on a master's degree in leadership here, she is helping the student team organize and conduct the homeowners' survey. Her involvement in the project stems partly from home and specifically from her two primary school-aged daughters.

"I've been told by my children that I have to replace my light bulbs," she says.

Her daughters have also persuaded her to buy reusable lunch containers instead of using packaged products. "They're the ones who told me the SUV has to go."