

CELEBRATING ALBERTA'S
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Sweat energy

Workouts produce watts on campuses and in gyms

JEFF BARNARD
The Associated Press

EUGENE, Ore. — As she pedalled an elliptical exercise machine at the University of Oregon, Wen Lee's face lit up like the light bulbs she was powering.

"I could run my television with this," the environmental studies graduate student said between breaths, making the three bulbs on the stand in front of her glow brighter as part of a demonstration of renewable people power.

The University of Oregon — one of its school colours is, after all, green — is the latest in a growing number of college campuses and exercise clubs across the country where workouts produce watts.

Splitting the \$14,000 cost with the local utility, the school has retrofitted 20 Precor elliptical machines to generate electricity using technology from ReRev.com of St. Petersburg, Fla. The power from each machine in the student recreation centre goes through a converter that turns DC into AC, and a meter to keep track before it flows into the grid.

Good fit

The amount of electricity produced is small. The university estimates that 3,000 people a day on 20 machines would generate 6,000 kilowatt hours a year, enough to power one small energy-efficient house. But it fits in with other sustainability projects, such as solar panels on the rec centre roof, and a high sense of being green among the student body.

"Oh, wow! It's awesome! That's cool!" said sophomore Eileen Donnerberg when told the machine she chose for her workout was producing electricity.



JEFF BARNARD/AP PHOTOS

University of Oregon graduate student Wen Lee watches the results of her electricity generation while using an elliptical exercise machine.

"I never thought of that. It's a good thing."

The machines are even making their way into the run-up to one of the school's biggest events: the annual Civil War football game with Oregon State University. OSU connected 22 exercise machines to the grid last February and will compete with Oregon to see who can generate the most electricity.

The power is a drop in the bucket compared to the University of Oregon's overall electricity consumption, which is equivalent to 2,280 houses, said sustainability director Steve Mitral.

"We're not going to get off Middle Eastern oil by connecting up all the ellipticals all over the country," said Mitral. "We bought it and installed it mostly because it's an educational opportunity. People will be on those things sweating away and it gets them thinking."

The school decided to take the plunge at the suggestion of students, who were inspired by a demonstration of exercise bikes charging batteries at last year's Olympic track and field trials held here.

"So much of this talk about renewables is fairly abstract," said Mitral.

"You jump on one of these machines and 30 minutes later you have a deep visceral understanding of what that

means. That's what I'm after, primarily."

ReRev.com stands for Renewable Revolution, and was started by Hudson Harr, 23, soon after he graduated from the University of Florida, which was an early adopter.

Generator-equipped

After pulling the guts out of a variety of exercise machines, from bikes to stair steppers, Harr found that the Precor elliptical already had a small generator that powered the control panel and produced resistance. Most other brands and devices use alternators, which are better suited to charging batteries, as they do in cars.

Harr's outfit figured out a way to replace the resistors that eat up the excess power generated, and instead send

it to the power grid. He has a patent pending.

ReRev.com estimates a typical 30-minute workout on one machine generates enough electricity to run a laptop computer for an hour, or a compact fluorescent light bulb for 2 1/2 hours.

Ten facilities are using the technology, and Harr said he hopes it spreads as other manufacturers switch to generators instead of alternators.

"There are over 30,000 health clubs in the U.S.," said Harr. "If you could figure each one producing electricity will take one house off the grid, that is 30,000 houses off the grid."

On the Net:
ReRev: <http://revel.com/>
Univ of Oregon: <http://www.uoregon.edu/>



University of Oregon fitness instructor Alicia Swift demonstrates how working out on a specially equipped elliptical machine generates electricity.

Google to watch gadgets

MONTREAL — Google has come up with a tool that can show consumers on their home computer how much electricity their appliances and gadgets are using.

The Google PowerMeter can display, for example, how much it would cost to leave

a TV on all day or how much energy a computer is using.

The search engine giant says it's partnering with utility companies and some device manufacturers to introduce the technology.

It says its software can display data from energy moni-

toring devices that would be installed in people's homes.

Google PowerMeter isn't available yet to the general public but is being gradually rolled out in tests with utility companies.

— The Canadian Press



University of Oregon students and faculty exercise on the school's specially outfitted elliptical machines.