

Simplicity is knowing your health
and wellbeing are being cared for

PHILIPS
sense and simplicity

[Back to Article](#)

[Click to Print](#)



Friday, Aug. 10, 2007

Sustainable Programs

By Sonja Steptoe

University officials are dreaming up eco-friendly school programs and policies that go beyond recycling, responsible trash disposal, organically grown cafeteria food, low thermostat settings and power-use monitoring to minimize their carbon footprints. Here are a few of the more creative examples:

Rochester Institute of Technology in upstate New York is developing an interdisciplinary PhD program in sustainability. Funded by a Henry Luce Foundation grant, the program melds public policy, business management, engineering, industrial development, architectural design and economics. Nabil Nasr, the director of RIT's Sustainability Institute, also touts a cutting-edge remanufacturing process that engineering students and professors are developing. Used products such as disposable cameras, airplanes, auto engines and electronic products are disassembled and mined for components that can be reused in manufacturing new products; what's left over is recycled. "Through this process we [can make] products that carry half the cost of new production and that leave a significantly lower environmental footprint," he says. "It will change the rules of production as we know them."

MIT's "Walk The Talk" initiative creates campus programs to significantly reduce the estimated 270,000 metric tons of CO₂-equivalent emissions by the university each year, says Steve Lanou, deputy director of the sustainability program. One project that could make a big dent is the student-led biodiesel@mit effort to install a solar-powered biodiesel processor at the school that converts the vegetable oil waste from campus dining facilities into biodiesel to be mixed with regular diesel to power MIT's fleet of diesel vehicles. Additionally, the chemistry department head, the facilities director and environmental health chief are taking policy cues from a student thesis to drastically curtail the energy consumed by 1,200 chemical fume hoods in campus labs. One finding: By merely keeping the hoods closed when not in use, MIT could save \$1 million in energy costs.

Carleton College in Minnesota used a chunk of its working capital fund three years ago to buy a \$1.8 million green-power wind turbine because administrators determined that the return on such an investment would match what they could get from mutual funds.

Unity College, a tiny liberal arts school in Maine, conducts an annual campus CO2 audit and brags about the steps—such as the construction of two LEED-certifiable buildings, the purchase of all of its electrical power from renewable resources and the use of a student-built wind turbine and a solar generator to power a small dormitory — it has taken to lower per-student emissions to 4,000 lbs a year. Unity has also designed an interdisciplinary course in human ecology and sustainability that's now a graduation requirement for every student.

Stanford University biological sciences professor Chris Field claims that the global ecology lab he runs on campus for the Carnegie Institution is the "greenest research lab in the world." According to him, the facility's carbon emissions are 1/6th that of a typical new lab in California. "It's not carbon neutral because we don't have our own power generation equipment — yet," he says. The lab employs nightsky radiative cooling, a system using small roof sprinklers to create thin films of water that are chilled in the night air and then collected into a tank for pumping through the building during the day to add cooling. Energy efficient glazing on windows reduces heat loss in winter and heat gain in summer. Additionally, the lab's infrared-reflecting Kynar roofing reflects the solar heat back into space and lowers the temperature inside.

 [Click to Print](#)

Find this article at:

<http://www.time.com/time/nation/article/0,8599,1652068,00.html>

Copyright ? 2007 Time Inc. All rights reserved. Reproduction in whole or in part without permission is prohibited.

[Privacy Policy](#) | [Add TIME Headlines to your Site](#) | [Contact Us](#) | [Customer Service](#)