Letters

Energy Conservation

The argument of Amory B. Lovins and L. Hunter Lovins (Letters, 13 May, p. 666) for energy conservation at colleges and schools is well taken. Major expansion and energy price increases have pushed utility costs at the State University of New York (SUNY) at Buffalo up from less than $1 million in 1972 to nearly $13 million in 1982. Under the circumstances energy conservation is more than a worthwhile environmental ideal. For us it is a necessity.

Like many other schools, we began our energy conservation program in 1973, the advent of the "energy crisis." Between then and 1981 the physical plant departments on both of our campuses implemented numerous energy-saving measures resulting in estimated cumulative savings of $10 million. Last year, we reinvigorated our program and embarked on numerous additional conservation projects, including a policy to maintain cool temperatures (55° to 60°F) in our new large sports arena, indoor and outdoor delamping and relamping, reinsulation of campus steam lines, conversion of electric hot water heaters to natural gas, installation of ceiling fans and replacement "heat wheels" (for heat reclamation), and modification of laboratory fume hood exhaust systems (to reduce heat loss while maintaining safe conditions). While the latter project addresses the laboratory exhaust heat loss problem in only one of our research buildings, it is expected to save more than $100,000 per year in avoided energy costs.

This year we also embarked on a long overdue program to equip dormitory students with some "appropriate technology," namely a screwdriver-like device to permit adjustment of not-too-accessible room heater thermostats. Our "Conserve UB" energy awareness program compliments this as well as our other conservation projects by publicizing the need for energy saving and encouraging everyone to pitch in and do their part. While we still see lights left on in empty classrooms, this kind of energy waste is occurring with less frequency.

I do not want to give the impression that we have achieved perfect efficiency. The Lovinses could still find much energy waste to be mined from our over 7 million square feet of classroom, laboratory, and office space. We are, however, making progress. The fine cooperation we have had from students, faculty, and staff is attributable, in part, to conservation's tangible benefits. Last year, we were able to voluntarily give up $1.2 million from our utility budget (beyond what was taken back because of warm winter weather) in exchange for a promise of no retrenchment. New York's fiscal plight is more severe this year, and it may be impossible to entirely avoid some layoffs. However, by holding the line on energy consumption we know we will be saving some jobs, an accomplishment not lost on the SUNY Buffalo community.

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Lovins and Lovins are right. The tighter the building, the lower the fuel bills. Our group, the Damascus Energy Savers, has donated many Saturdays and evenings helping people save fuel in just that way. But lately, after working with the Department of Energy's Environmental Measurements Laboratory in New York measuring indoor radon levels in some of these homes, we are having second thoughts. The houses in which the measurements were made, although "tighter" than average, also have higher radon concentrations. We cannot find any official guidance on action levels or what to do about the problem, but many of our homes fail to meet the Swedish standards for new homes (2 picocuries per liter), and several would require immediate remedial action (more than 10 picocuries per liter) if U.S. standards were the same as those in Sweden.

The problem is not trivial. The Environmental Protection Agency estimates that between 6,700 and 13,400 people die each year in the United States from lung cancer from radon. The scientific literature, although sparse, indicates that public buildings have less radon than do homes. But whatever the levels of radon may be in the buildings the Lovinses describe, they will tend to increase as circulation with the outdoors decreases. And, no matter how low the radon is initially, any increase leads to a corresponding increase in cancer deaths, according to the currently accepted linear hypothesis on radiation dose-effects.

This collision course—a desire to save energy by weatherizing the home versus a fear of a higher probability of lung cancer—has had profound moral implications for our group. And yet the Lovinses, energy experts of world renown, do not mention this dilemma and talk only of saved BTU's and increased teacher's salaries. If the possible cost of human lives is considered, it seems that there is (still) no free lunch.

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Correct Butterfield

In my review of Colin B. Burke's *American Collegiate Populations: A Test of the Traditional View* (20 May, p. 814), I erroneously attribute *The Whig Interpretation of History* to the late Lyman H. Butterfield, distinguished editor of the John Adams papers. *The Whig Interpretation of History* was written by the English historian Herbert Butterfield. I regret the mental slip.

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Cancer Research

Harry Rubin is to be congratulated on his cautionary yet positive comments (Letters, 11 Mar., p. 1170). It is an unfortunate fact that much of cancer research during the past 40 years has been directed toward a series of specific problems that have assumed the characteristics of cancer or even "the cancer cell" to be well defined. Generalized contemplation of cancer as a disease process or in the context of pathological reactions is frowned upon as outdated thinking. Any suggestion of a role for teleological considerations would be even more disapproved. As Rubin points out, there is unqualified acceptance of the "risky assumptions" that the malignant character of cells is dependent on a gene mutation or on a chromosomal transposition. I agree that these are, indeed, risky assumptions. Further, however, I believe that the use of the term "transformation" is at the root of many of our problems. The advantages of us-