Renewable energy certificates are a feel-good scam

College students and corporations, including Intel and Cisco, are getting fleeced by green-energy scammers.

Today, hundreds of universities and companies enthusiastically purchase billions of credible-sounding "Renewable Energy Certificates" in the belief that their investments are developing alternative energy sources, such as wind and solar power. They are doing no such thing. Instead of unwittingly buying empty bragging rights, these schools and corporate players should pay for real energy projects with measurable impacts, like rooftop solar panels and improvements in energy efficiency.

Eager to lighten their carbon footprint, students at my own campus, the University of California-Santa Cruz, voted in 2006 to increase registration fees to buy enough certificates to offset the entire campus's consumption of electricity made from fossil fuels. They bought 57 million certificates in 2007, a commitment that cost about \$100,000. Soon thereafter, the U.S. Environmental Protection Agency (EPA) hailed UC-Santa Cruz for purchasing 100 percent green power.

Intel bought 1.3 billion certificates in 2008; Cisco purchased 385 million and IBM snapped up 10.2 million the same year.

But UC-Santa Cruz, Intel, Cisco and IBM continue to buy power from Pacific Gas & Electric or other conventional utilities, which generate electricity primarily from fossil fuels burned in huge power plants.

My students thought they were subsidizing wind power. What they actually got was a lot of hot air.

To understand why, consider the economics of renewable-energy production. Wind farms in California and Texas sell electricity on the wholesale market, with a significant boost from federal production tax credits for renewable energy. But prices for renewable-energy certificates, as negotiated by brokers and power producers, are very low — 10 percent of the difference between the cost of producing nonrenewable and renewable energy, and far too little to actually spur production.

By harnessing the power of the word "renewable" for spin and gimmickry, certificate brokers have persuaded hundreds of colleges to buy the "environmental attributes" of wind, landfill gas and solar energy — but not the electricity itself. "Environmental attributes" is the sort of mumbo-jumbo that's hard to explain in news releases and on Web sites, so thousands of certificate buyers simply say that 100 percent of their power is green.

Unfortunately, this has become a big business. According to the National Renewable Energy Lab of the U.S. Department of Energy, some 13,000 customers bought 10.5 billion certificates in 2007. Nobody knows exactly what these cost, but the lab's best estimates range from \$100 million to \$500 million.

Federal agencies are in on the act, too. The EPA hands out annual awards for the most green power purchased through REC suppliers, and it encourages competition between universities and other organizations vying to be the greenest in their class.

It would be great if the purchase of certificates made up the difference between conventional and renewable power, but at best this is a token subsidy for renewable energy. Most sales don't do much beyond paying the salaries — of people selling certificates.

Consumers and producers have embraced market-based solutions, but scams like this threaten to discredit the market.

At UC-Santa Cruz, student leaders see how they've been duped and are taking steps to cancel their contracts. By next year, I expect them to spend money on real power, not marketing gimmicks. Like my students, the country needs to make the right energy investments, which will reap savings and reduce emissions for years to come. Cheap certificates are a delusional Band-Aid that will further delay the energy transformation we so desperately need.

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