

The Rise of the Energy Efficiency Utility

Written by Bayu Indrawan

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A Vermont farmer decides to get rid of electric heating for his greenhouses and instead burns waste oil collected free from area restaurants, saving about US \$25 000 in four years, after an initial investment of \$12 000. A woman living uncomfortably in an old, drafty house insulates the attic and walls, buys new windows, and weather-strips doors, cutting her electricity costs by 30 percent and her heating bills by half. Similar improvements, plus new energy-efficient fans for a walk-in freezer, helped a village general store reduce its annual energy costs by \$1800, with an initial investment of \$8000. All those energy-reduction success stories and many, many more can be traced to the activities of Efficiency Vermont, an independent nonprofit provider of energy-efficient services. Similarly structured service providers are now operating with positive results in a number of other states. Established in 2000, Efficiency Vermont helps electricity customers find ways to cut their consumption, often just by providing them with free technical advice—as with the farmer switching to waste vegetable oil—but sometimes by subsidizing the purchase of energy-efficient products like lightbulbs or boilers. The program, administered by the Vermont Energy Investment Corporation (VEIC), is funded by a 4.5 percent fee attached to each customer's electricity bill.

Having helped close to 60 percent of the state's electricity customers in seven years, Efficiency Vermont is responsible for an electricity load growth of -1.8 percent in 2007, making Vermont the first state to achieve that goal through efficiency measures alone. Wisconsin and Oregon have established similar efficiency utilities, and this summer, Delaware will launch its Sustainable Energy Utility, or SEU—the most ambitious and wide-ranging variation on the model yet.

The notion of offering energy-efficiency services to the public is by no means a new one. Following the oil crises of 1973 and 1979, U.S. state regulators—with some encouragement from the federal government—often ordered utilities to set up programs to encourage customers to cut electricity use. Such programs generally went by the name of demand side management (DSM) or integrated resources planning, and they played an important part in curbing the growth of U.S. electricity demand well into the 1990s. But then along came electricity deregulation, and with it a tendency to reduce the role of the state regulatory bodies. DSM programs tended to atrophy too.

Efficiency utilities and DSM have a good deal in common, concedes Martin Kushler, who handles utility issues for the American Council for an Energy-Efficient Economy (ACEEE), in Washington, D.C. But the emphasis in the early days of DSM tended to be on conservation, he says, recalling U.S. President Jimmy Carter donning a sweater on national television. In the independent-efficiency utility, the accent is squarely on efficiency and on the economic advantages to be had from making improvements.

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Now Delaware is poised to join the ranks of states that operate efficiency utilities, but with much more ambitious goals. Its SEU, expected to be operational this summer, will oversee perhaps the most comprehensive energy savings and distributed renewables program in the United States. The SEU will be charged with reducing energy use from all fuels in Delaware by 30 percent by 2015—a third in homes, a third in businesses, and a third in the transportation sector.

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