



(L-r) Branford Schools Superintendent Kathleen Clark Halligan, First Selectman Anthony (Unk) DaRos, Mark Deming, director of buildings & grounds, and Board of Ed Chairman Frank Carrano.

## Outstanding Achievement: Branford Public Schools

### Branford Public Schools

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**Superintendent:** Kathleen Halligan

**No. students:** 1,200

**E**nergy costs have soared over the past decade — but not in the Branford school system. The town of Branford spent \$120,000 on energy for all its schools in 2008, the same amount the town spent in 2001.

An aggressive energy conservation campaign accounts for this fortuitous anomaly, according to Mark Deming, director of facilities for Branford Public Schools. A cutting-edge tri-generation power system at the high school combined with measures from installing LED lighting to setting computers to shut down at night has put Branford schools in the vanguard of green efforts among Connecticut schools, he says.

"It started as cost-cutting measures and it just kind of snowballed from there," Deming says. "If you're saving energy, you're also helping reduce your carbon footprint."

Deming began implementing cost-cutting measures when he joined the school system in 2001. "The utility portion of my budget was the largest portion that I could affect when I started here," he explains. "I felt that was one place that I could have a real impact."

In his first years Deming took action to revamp HVAC systems, implement non-pesticide pest control measures, upgrade vacuum filtration systems, install chemical dilution dispensers to minimize chemical use, and upgrade recycling efforts.

More recently Deming has installed waterless urinals, LED lighting, software to power off computers automatically, sensor faucets, and new water treatment technology.

Installing LED lighting in the Branford High School auditorium and library saves at least \$2,300 a year, Deming says, and saves even more in maintenance costs since LED lighting requires less maintenance.

In January 2008, BHS became the first school in Connecticut to install a clean UTC Power on-site tri-generation power system. Developed by UTC Power, a subsidiary of United Technologies Corp., the PureComfort system provides on-site power, cooling and heating with ultra-efficient new technology that will save money and cut the school's carbon footprint. The system will also allow the school to function as an emergency shelter for the town, since it is an on-site power source.

The PureComfort system provides simultaneous heating and cooling, with no seasonal changeover required, using the hot exhaust from natural gas-fired microturbines to drive a double-effect absorption chiller. It can achieve energy utilization rates of up to 90 percent, compared with the 33 percent typical of most energy systems. It also reduces pollution and will save more than 2.5 million gallons of water a year, UTC Power says.

Currently Deming is studying the feasibility of changes at the Francis Walsh Intermediate School, including installing a hydro-solar hot water system and a photovoltaic solar power system. He says he hopes to extend green technology and practices throughout the systems' six schools.

Branford First Selectman Anthony (Unk) DaRos says Deming's efforts have paid off both in cost savings and environmental stewardship.

"Our schools are older, refurbished, so we have to think about energy consumption," DaRos says. "The school system has taken that very seriously and they have been able to produce substantial improvements in energy costs. Besides saving money it's reducing our carbon footprint."

— Steve Higgins



**Chef Claire Criscuolo has been going green**