

Commitment to energy efficiency continues to pay off for Tri-C

Cuyahoga Community College's (Tri-C®) energy master plan has realized more than \$17 million in savings through the end of fiscal year 2011, thanks to significant improvements in energy and water efficiency.



In partnership with the Brewer-Garrett company, Tri-C embarked on a journey in fiscal year 2002 to reduce energy consumption. Brewer-Garrett guaranteed savings based on the energy efficiency efforts they put into service. Per Ohio regulations, improvements made before 2008 were expected to pay for themselves in 10 years or less, and improvements made from 2007 on have been expected to pay for themselves in 15 years or less. Projects implemented to date include

LED and high-efficiency fluorescent lighting retrofits, boiler and chiller replacements, building air conditioning system optimizations, and swimming pool cover installations, among others.

Brewer-Garrett compares reductions in energy use to a baseline year of 2000, before energy control measures were implemented, and adjusts baseline values for building space that has been added, changes in student population, weather and other factors. When including these adjustments, electricity use has decreased by nearly 33 percent since the program began, which equates to over 19 million kWh saved in FY 11 – enough to provide electricity to over 1,680 average U.S. homes for one year. In addition, natural gas has decreased by over 18 percent, which is over 35 million cubic feet in FY 11 – equivalent to the natural gas used by about 490 average Ohio homes each year.

FY 11's savings alone for electricity and natural gas were more than \$1.78 million. Without accounting for additional square footage, the significant increase in student population, weather and other factors, the energy savings since the energy control measures implementation began are impressive – a 15 percent decrease in electricity use and a 9 percent decrease in natural gas use.

Over the course of the 17-year partnership with Brewer-Garrett, total energy and operational savings of the program are projected to exceed \$51 million, providing a 45 percent return on Tri-C's investment and helping to keep Tri-C's tuition the lowest in Northeast Ohio.

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