

MOUNT WACHUSETT COMMUNITY COLLEGE

Gardner, MA

Facility Type:	College Campus
Facility Size:	400,000 sq.ft.
Type of Contract:	ESPC
Term of Contract:	10 Years
Total Capital Cost:	\$4,300,000
Total Annual Savings:	\$2,728,000



To meet its goal of replacing a costly electric heating system with a renewable energy source, while also enhancing its forest products technology curriculum, MWCC selected NORESCO to implement a low emission advanced biomass boiler plant and other conservation measures.

The centerpiece of a \$4.3 million energy and water conservation effort, the new 320 bhp biomass plant utilizes wood chips, a byproduct of the more than 80 sawmills across Massachusetts, to provide heat to the college's 400,000 square feet of space. This new system also features a state-of-the-art core separator that cleans 95% of the particulate matter from the exhaust to ensure that the plant meets all State and Federal clean air requirements.

In addition to providing energy analysis, engineering, and construction management services, NORESCO has also worked with the college to secure a \$1 million Department of Energy grant, \$750,000 from the Commonwealth of Massachusetts Renewable Energy Trust Fund, and \$200,000 in rebates from the local utility to partially offset a considerable portion of the project cost. NORESCO also provided support in the arrangement of tax-exempt lease financing for the remainder of the project cost.

Additional energy and water conservation projects developed and installed by NORESCO included:

- Energy efficient lighting upgrade covering more than 4,400 lighting fixtures.
- Retrofit of toilets, urinals and sinks with low-flow flushometers and aerators.
- Installation of VFDs on air handling unit supply and return fans to vary electric consumption in accordance with heating and cooling demand.

““This is a guaranteed energy savings project that is both economically sound and environmentally responsible...a fuel source that is renewable, locally available, cost effective, non-polluting and publicly acceptable.”

Edward R. Terceiro, Jr.
Executive Vice President
Mount Wachusett Community College

NORESCO

NORESCO is the nation's most experienced energy service company providing comprehensive and proven energy-efficiency solutions and infrastructure development and operations strategies to a wide range of customers. A recognized industry leader installing and operating over \$1.4 billion of proven energy solutions in diverse markets across the nation, NORESCO has built on-site energy infrastructure generating more than 300 megawatts of power, and has helped customers improve energy efficiency saving over 31 billion-kilowatt hours of electricity and 71 trillion Btus of fuel. NORESCO is accredited by, and a charter member of, the National Association of Energy Service Companies.