

# PME Case History

## Baxi Helps Hometown Hydronics Hero Save City Hall

**T**wo years ago, Jim Godbout made the first commercial installation in the United States of multiple Baxi Luna HT modulating, condensing boilers. He has since installed high-efficiency Baxi wall-hung boilers in his hometown's city hall, city theatre, the ice arena and a local school.

As owner of Godbout Plumbing and Heating, Godbout lives by the axiom, think globally, act locally. For example, he embraces proven European hydronic heating technology in designing high quality HVAC solutions, like Baxi hydronic heating systems that deliver performance and environmental enhancements, energy efficiencies and fuel savings.

Godbout's first Baxi commercial installation involved the replacement of a failing 20-year-old cast iron boiler system at Biddeford Ice Arena. His crew's installation of a cascade of five gas-fired Baxi Luna HT 1.65 boilers (maximum output 222,000 Btu/h each) quickly became "the talk of the town." The Baxi system distributes heat evenly throughout the arena. It also provides on-demand hot water for a 120-gallon indirect storage tank, used for showers and hot water for maintaining one of the finest ice surfaces in New England.

Impressed by the arena HVAC renovation, Biddeford city councilors asked Jim Godbout to help solve a massive plumbing and heating



system emergency at the 109-year-old Biddeford City Hall and City Theatre. His solution: preserve the heritage of the building while creating a brand new HVAC system, featuring eight Baxi Luna HT 1.65 boilers (1.8 million Btu/h total maximum output). He installed five of the Baxi units along the outside wall of a former third-floor archives room, and the other three backstage in the theatre.

Godbout stages multiple boiler systems, using Tekmar lead/lag controls to conserve fuel consumption. He uses outdoor sensors to optimize boiler performance and includes the

optional 10-year Baxi parts and labor warranty to provide peace of mind. The city hall complex also has a central computerized control system with a thermostat in most of the 56 separate zones in the 50,000 square-foot complex; if a zone becomes unoccupied, the system automatically sets back several degrees.

"Baxi boiler efficiency exceeded 98% for both the arena and city hall," Godbout notes. Fuel consumption savings range from 30% at the arena to up to 50% at City Hall. Biddeford also saves an average of \$20,000 a year in previous costs to maintain the old boilers, where employee absenteeism is down significantly.

"I believe enhanced comfort and a healthier environment are the most impressive outcomes of our work. We expected to achieve high efficiencies and fuel savings, but we should have included the tremendous value of reduced employee absenteeism in the project's cost-benefit analysis."

Baxi has been making high performing wall-hung boilers in Europe since the early 1970s. An appliance preferred by Green Builders, all high-efficiency Baxi wall-hung boilers meet North American performance and safety standards, including the ASME H-Stamp on heat exchangers. Baxi boilers produce 90% less CO emissions and 80% less NOx.

**Circle 21.**