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# New England CONDOMINIUM

*The Premier Guide to Condos, Co-ops and Planned Communities*

## Green Generation

Co-Generation Makes Economic and Environmental Sense

By New England Condominium



Many condominiums these days are looking to save energy and go "green," but are concerned that doing the environmentally right thing will cost them a lot of green, as in cash. Discouragingly, energy-saving items like super efficient replacement windows tend to be expensive to purchase and install and have long payback periods.

But a number of New England condominiums have discovered that there is still some low-hanging fruit in the energy conservation arena. For community associations that can utilize the technology, co-generation offers an extremely short payback time, followed by year after year of savings that run in the tens of thousands.

Co-generation involves a natural-gas-burning generator at a condominium, about the size of an office desk, and using its cheaply- produced electricity in place of energy purchased from a utility. What makes co-generation a double value is that it also captures the considerable heat created by the production of electricity and uses it to supply heat and hot water to the condominium — providing two types of energy from one source.

"Just like your car is dumping heat through its radiator, you're wasting some of that energy. What we're trying to do is utilize every single ounce of energy," says Peter L. Goldsmith, Marketing Coordinator of Aegis Energy Services Inc. in Holyoke, Massachusetts.

Savings from using a co-generator are substantial, typically reducing condominium utility bills by one-half to two-thirds, says Goldsmith.

## \$45,000 a Year in Savings

Seaport Condominium at Marina Bay in Quincy, Massachusetts, installed a single 75-Kilowatt co-generation unit about nine months ago and it is already generating about \$45,000 a year in savings, says Goldsmith. Most condominiums can repay the cost of the co-generation unit in two to five years, he says.

Seaport Condominiums joins a growing number of communities and facilities in Massachusetts that have installed co-generation systems, including The Towers in Chestnut Hill in Newton; Wingate, an extended health care facility in Brighton; Country Club Heights in Woburn; Harbor Point Apartments in Dorchester; Deutches Altenheim Nursing Home in West Roxbury,; and Francis Cabot Lowell Mill in Waltham.

Condominiums that are good candidates for co-generation are those that are over 85 units, have a high on-site demand for heat and electricity, and already have natural gas service, says Goldsmith.

The energy demand could take the form of a year-round swimming pool, health club, kitchen, or, most importantly, the use of a central loop system by which water is pumped throughout the facility to provide both heat and domestic hot water.

## Existing Boiler Life Greatly Extended

Co-generation units, producing 75 kilowatts per hour, are typically set up in the boiler room and supplement— but don't replace—the existing boiler. Because the co-generation unit works in conjunction with the boiler, it can greatly extend the life of the existing boiler. It will extend the life of the boiler by reducing demand. A lot of places that are thinking about replacing old boilers, can get many more years of service out of them. In reality [with co-generation], your boilers really aren't going to be turning on much at all.

## Purchase of Co-generation Units not Needed

Condominiums that are interested in installing co-generation units but can't, or prefer not to, lay out large amounts of cash can take advantage of an shared savings program" offered by Aegis Energy Services, Inc, Holyoke Massachusetts.

"We take their avoided cost, their electric rate, and we give them a 15 percent discount off of it.

"Whatever the price they would pay, we're always 15 percent less. If the price of electricity drops to eight cents or jumps to 15 cents, we will always give them a 15 percent discount.