

Time to Brush the Rust Off of America's Aging Boiler Fleet

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With America's sentiment toward energy and the environment turning "green," the business community increasingly is focused on finding sustainable energy solutions. Every day, it seems, we hear news about cleaner, more affordable energy from sources such as solar, wind, hydrogen—the list goes on.

While new ideas intended to save energy, cut our dependency on fossil fuels, and limit greenhouse-gas emissions certainly merit consideration, it is important to maintain a balanced perspective when it comes to boilers.

The fact is, the infrastructure of the nation's boilers predominately supports firing with natural gas, fuel oil, coal, and biomass. Still, there is a tremendous opportunity to save energy and reduce emissions—without a major breakthrough in technology, large expenses for research and development, or the loss of time.

The majority of commercial and industrial boilers are well beyond their average expected life. The combustion controls and burners of older boilers generally are far less efficient in controlling fuel and air and tracking load changes

than those of modern boilers. Further, older boilers emit many times the amount of greenhouse gases. Energy savings of 10 to 20 percent can be experienced with the installation of new boilers, burners, controls, and waste-heat-capturing ancillary equipment.

General maintenance is important to efforts to reduce overall energy consumption, as a hot-water and steam-distribution system left operating in a state of disrepair can experience a loss of more than 20 percent of distributed energy. Conservation measures engineered and applied at the point of use of distributed energy can enhance efforts to reduce energy consumption.

Opportunities for a commercial or industrial boiler owner to generate energy savings in the 10-to-40-percent range exist, depending on the age, state of repair, and operating characteristics of the overall system. With the current

cost of fuel, an owner can pay for the upgrade of a system with the resulting fuel savings alone.

Replacing old boiler systems with new equipment offers the benefit of reduced greenhouse-gas emissions, as well as less fuel being consumed because of higher operating efficiency. These energy savings, coupled with conservation measures and a general tightening of distribution systems, can provide a much "greener" boiler fleet than the rusty one of today.

The member companies of the ABMA are proud to offer innovative solutions to help achieve the benefits of an up-to-date boiler system.

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