

Emerson Takes Aim at Industrial Energy Use

By Jim Montague, Executive Editor, [Control](#)

There's talking about green. And then there's living green. But when you want to move from one to the other, that's when you find out who your real friends are. To help its customers worldwide get the most out of every single BTU they use or produce, Emerson Process Management unveiled its new Smart Energy Initiative today at the 2011 Emerson Global Users Exchange in Nashville.

The Smart Energy Initiative is a global program designed to combine Emerson's industrial energy expertise with advanced energy management technologies to enable customers

to leverage more renewable fuels, cut energy costs and reduce emissions. With energy comprising 30% or more of a typical facility's overall operating costs—combined with higher prices for fossil fuels and new global emissions mandates—industrial customers are increasingly looking to waste fuels, biomass and other renewable sources as a solution.



"Improved controls are helping us achieve our vision of becoming energy self-sufficient." Tata Steel's Andrew Rees explained how the company plans to reduce powerhouse energy consumption by 3% to 5% through better monitoring and optimization of combustion processes.

Emerson's new Industrial Energy Group will focus on modernizing and improving the performance of powerhouses, the onsite utilities that provide steam and electricity to power industrial operations, while also improving how the manufacturing process consumes energy. "With industrial manufacturers consuming an estimated 50% of the world's energy, combined with rising fossil fuel prices and global mandates for reduced emissions, our customers need more than incremental efficiencies in energy management," said Steve Sonnenberg, president of Emerson Process Management. "With our Smart Energy Initiative, Emerson is introducing a fundamentally new platform that can change energy economics globally."

The heart of Emerson's integrated technology platform is its "True BTU" technology, a patent-pending innovation for calculating the actual BTU values of fuel sources, which makes reliable energy production predictable and repeatable.

"Our True BTU Combustion Control platform reinvents the current model of combustion management, which has been around since the 1920s and is still in practice today," said Chip Rennie, director of the Industrial Energy Group. "This brings about nothing short of a reinvention of combustion models, which will make the prevalent use of low-cost fuels like biomass achievable and sustainable."

In fact, Tata Steel's plant in Port Talbot, Wales, U.K., recently upgraded the controls on its largest steam boiler using Emerson's new energy-management principles, technologies and services. However, unlike most run-of-the-mill boiler upgrades, these new principles and controls are enabling Tata to increase its energy efficiency, maximize use of waste fuels, cut emissions and reduce its former reliance on purchased fuels.

"The boiler upgrades are helping us make better use of 'indigenous' waste fuels, such as blast furnace gas, BOS gas and coke oven gas, which are byproducts of our manufacturing process," said Andrew Rees, manager of Tata Steel's upgrade project. "The improved controls are part of a comprehensive energy management project that's expected to reduce powerhouse energy consumption by 3% to 5% and help us achieve our vision of becoming energy self-sufficient."

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