



Reducing Carbon Footprint in the Industrial Sector

Going green isn't just for buildings anymore; the sustainability trend has also hit the industrial sector. In 2009, the Northwest Food Processors Association (NWFPA) and the Department of Energy announced aggressive goals to reduce energy use and carbon emissions by 25 percent over the next ten years. This topic will be discussed at this year's annual Sustainability Summit, which is held in conjunction with the NWFPA's annual conference in January at the Oregon Convention Center.

Industrial companies can reduce energy usage by training employees on energy efficiency, formalizing operations and maintenance plans, implementing renewable energy solutions and changing the company culture so that energy reduction is a corporate value.

Another opportunity to conserve energy is to upgrade old equipment with new, more energy-efficient technology. Many industrial companies have aging boilers, used to produce process steam, that consume large amounts of energy and are costly to maintain.

Combined Heat and Power (CHP) technology has been successfully used to reduce energy usage in industrial processing facilities that utilize large amounts of process steam. CHP plants produce both steam and electricity from a single fuel at a facility co-located with the steam host. These systems offset some of the cost of producing process steam by generating electricity for sale or use as a part of the CHP process.

There are many benefits to using a CHP system including reducing the demand on the utility grid, increasing energy efficiency, lowering greenhouse gas emissions and protecting the property against power outages, while significantly lowering the utility costs of building operations.

Plant managers and owners may believe the cost of upgrading isn't practical, but with the tax incentives and grants that are available for energy efficiency improvements, upgrading is more cost effective than they may realize. It allows owners to shift their investment from steam generation to improving their food processing line. It also significantly reduces their carbon footprint; something that is being required by more of their clients every year. New technology, combined with overall energy programs and practices, will help this industry achieve the goals set forth by the NWFPA and the Department of Energy.