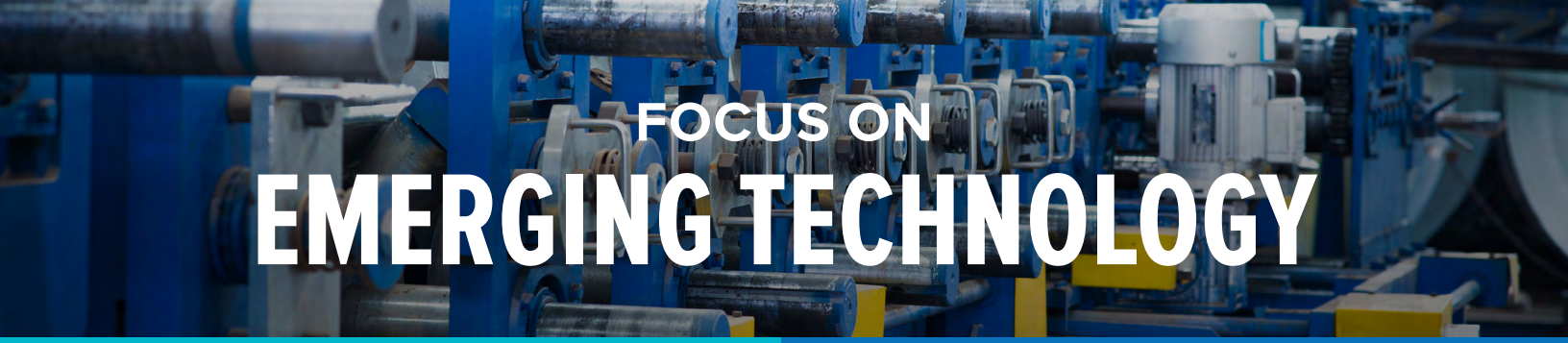

FOCUS ON

EMERGING TECHNOLOGY

BIOGAS CONDITIONING SYSTEM TO PROVIDE BIOGAS FOR BENEFICIAL USE

Technology Description

Many industrial facilities and municipalities have waste treatment facilities to treat organic wastes. Traditional treatment systems use aerobic processes to separate organics from the waste stream. Some facilities choose to employ anaerobic treatment systems. When a site implements an anaerobic treatment system, biogas is produced. This biogas can be used to offset a facility's natural gas and/or electrical usage. However, to reliably utilize biogas, it must be cleaned. This is required whether the gas is combusted in a process boiler or as fuel for a combustion engine/generator. This technology is a system that produces clean biogas that can be deployed on-site.

The first steps to determine project viability are to quantify total energy available and the specific contaminants that need to be removed. Contaminants can vary widely by the source of waste material being anaerobically treated. The need for removal of contaminants may also vary. This is determined by the quantity and quality of biogas to be burned, how the biogas will be beneficially used, the boiler design, and environmental regulations.

Benefits

1. Reduced natural gas and/or purchased electric consumption.
2. Reduced greenhouse gas emissions.

Customer Type

Pulp & Paper manufacturers, food processing plants, dairies, municipal wastewater plants, etc.

Applications

Anaerobic digesters.

Market Sectors

Industrial, Agriculture, Government.

Potential Energy Savings

Varies by size of plant and organic waste being treated.

Potential Payback Range

3+ years, pre-incentive.

Incentives Available

Download and complete the Custom Project Incentive Guide [PDF] or Find an Energy Advisor to get started.