

# Biogas management

Convert your waste to money.  
We can help you convert pollutant loads into biogas.

Are wastewater treatment costs and energy bills hurting your budget?

Is compliance with phosphate licences causing you headaches?

Are nuisance struvite deposits increasing your maintenance costs?



Calix ACTI-Mag can increase the quality and quantity of the biogas coming from anaerobic systems, and provide a significant economic boost for food processing plants.



Boost biogas volume by up to 20%



Increased power generated from biogas

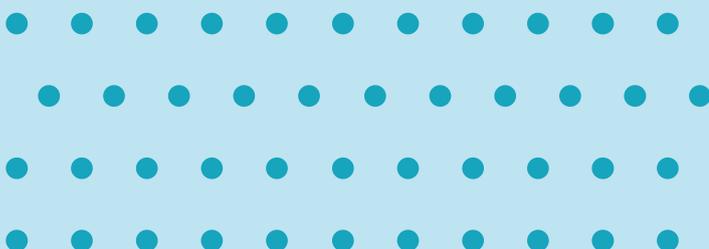


Reduced soluble phosphate in the final waste stream



Less maintenance due to corrosion of generators and heat exchangers

**Energy from biogas produced from anaerobic digestion of wastewater sludge is a powerful source of renewable energy, don't waste the waste!**



## ENERGY EFFICIENCY AND COSTS

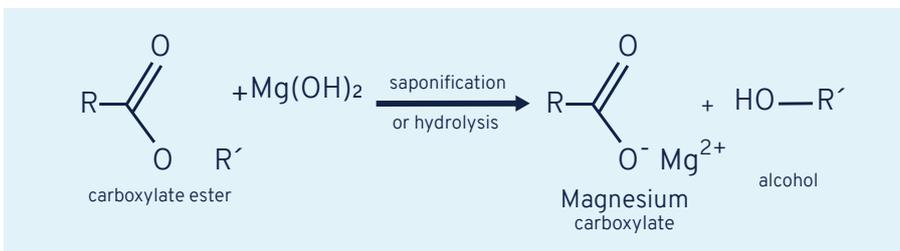
Treating wastewater from municipalities and industries has a dual potential benefit. Treated water can be recycled to help cut down industries' fresh water use, and the organic matter in wastewater can be converted to biogas and used to produce electricity.

Anaerobic digestion is a natural process that converts organic matter present in wastewater into biogas for electricity, as well as significantly reducing the contaminant load in treated water.

The energy produced from the biogas can be fed back into the grid or used in other parts of the production process, which represents a real opportunity to reduce energy costs.

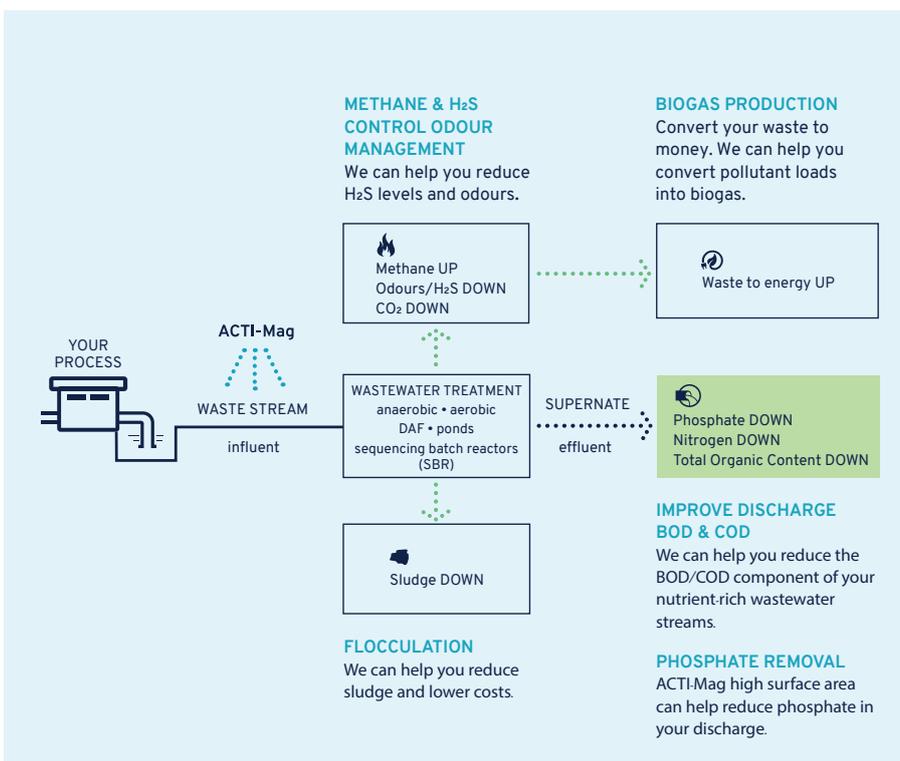
## HOW DOES ACTI-Mag WORK?

ACTI-Mag, with its unique high surface area and high localised pH surface, is able to break down complex organic matter by hydrolysis into smaller units, which allows the biological system to convert the organic matter into biogas more quickly, and improve the quality.



ACTI-Mag has been demonstrated to increase the quality of the biogas coming from the anaerobic system. Improved biogas quality including higher methane and lower H<sub>2</sub>S content improves the calorific value, which means improved performance from the electric generators. Improved biogas quality also means a reduced requirement on biogas scrubbers.

ACTI-Mag also provides more alkalinity and more stable pH control weight-to-weight than caustic soda. These two key parameters are very important to the health of any biological reactor.



## WHY CHOOSE CALIX

### FASTER REACTIVITY = COST SAVINGS

New materials produced by Calix's technology are proving to have similar properties to highly active nano-materials, without the safety concerns and high cost, but with all the benefits. This means it has the high reactivity of nano-material, without the potential health and handling issues. To learn more about Calix's technology, visit our website.

### FROM MINE TO CUSTOMER

Calix is able to offer better service, reliability and performance to its customers because it controls the entire production process from mining of raw materials, processing and production.

ACTI-Mag lowers chemical consumption and ensures easier use, handling and storage, thus considerably reducing costs.

ACTI-Mag also offers the following benefits:

- Fats, oils and greases control
- Phosphate removal
- Odour control cleansing the sewer
- Biochemical Oxygen Demand (BOD), Chemical Oxygen Demand (COD) reduction
- pH stabilisation and alkalinity boost

Read our other solution spec sheets or call us today to discuss the benefits of a whole-of-catchment approach.

### Distribution partners

Calix has established a network of local distributors and partners who can deliver our solutions across the globe, to ensure you receive excellent customer service and support, wherever you are located.

To find a Calix office or partner near you, visit:

[WWW.CALIX.GLOBAL](http://WWW.CALIX.GLOBAL)

