

**FOR WATER FOR LIFE**

# Biogas Boost

Increase biogas production, quick biogas generation, improve anaerobic digestion



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## Introduction

A biogas plant is an anaerobic digester that treats farm wastes or energy crops. It can be produced using anaerobic digesters fed with energy crops such as maize silage or biodegradable wastes including sewage sludge and food waste. Through micro-organisms transform biomass waste into biogas (mainly methane and carbon dioxide) and digestate.

## What is Biogas boost?

Biogas boost is a microbial complex, bacteria, enzymes, micronutrients and trace elements, developed specifically for the improvement of operational stability and increase the biogas production of anaerobic biogas reactors. The product is highly efficient in improving the speed of all phases of anaerobic degradation.



Power type, Flexible packing, 1 kg/pack.

## How it work in biogas plant?

In chronological order the four phases of the anaerobic digestion process are the following:

1. Hydrolysis
2. Fermentation or acidogenesis

3. Acetogenesis
4. Methanogenesis

During hydrolysis, the effect of Biogas boost hydrolytic bacteria can be detected primarily at the faster hydrolysis of hardly bio degradable organic macromolecules, as this is the limiting step of the four processes in terms of reaction rate.

During the fermentation, Biogas boost help the formation of proper, stable, and homogeneous end product composition, fast-metabolising acidogenic microbe population, and as a result of the above, stable, constant acetate-formation will be achieved. It helps to avoid the increase of Hydrogen's partial pressure, which depresses the acetogenesis.

Biogas Boost contains both hydrogen-utilizing and acetoclastic methanogens, and besides that, the most important criteria during the selection of methanogenic species were the short generation time and the resistance against inhibitory and toxic factors.

## Biogas boost application

- ✓ Biogas Plants

## What is the benefit?

- ✓ Quick start up to minimize the lag time for anaerobic system
- ✓ Improve performance of anaerobic system;
- ✓ Quick biogas generation and more stable
- ✓ Sufficient utilization for feed stock, so that more biogas volume is generated.
- ✓ Biogas generation duration is continuously and longer.

**Dosage:** 20~30 gram / cum.