



## Sustainable wastewater treatment by Bio-electrochemical waste to energy MFC

### Applications

- Water treatment facilities
- Beverage factories
- Livestock farms
- Food factories

### Problem & Solution

Many industrial facilities face an increasing cost for waste water treatment as well as a surge in waste water discharge penalties. Inadequate on-site facilities/municipal treatment access by businesses has taken a toll on the environment.

This MFC technology harvests energy created from the process of waste water treatment which can be used to offset the energy cost of the treatment itself. When added as improvement to anaerobic digestion (AD), the amount of sludge and digestate produced decreases, lowering the cost of managing the digestate. This system also enhances overall biogas production and energy recovery by treating low energy value substrates which are unsuitable for conventional AD.

### Benefits

- Stable anode bio-film
- Economical treatment
- Reduced maintenance, remote operation
- Suited to small/medium sized businesses
- Suited to deployment in developing countries
- Operates as a sustainable biological battery

### Patent pending

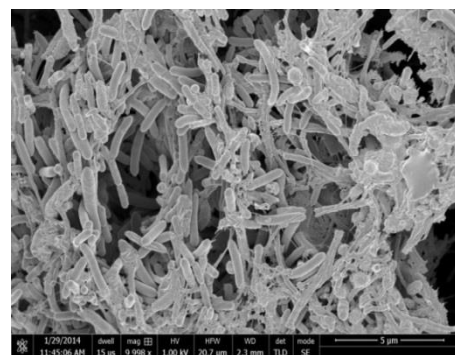
### Keywords

Microbial Fuel Cell, wastewater treatment, bio-remediation, biogas, modular installation

### For more information

Business Development/Technology Licensing Section

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Bacterial connection to electrode



Prototype MFC at distillery operating continuously since 2013