

# Industrial Wastewater Treatment to Support Healthy Watersheds and Communities

Reduce operational costs and achieve water stewardship and climate action goals



# Remove highest levels of organics faster

We treat the tough stuff. Consumer Packaged Goods (CPG) companies spend millions of dollars per year, per facility in trucking and surcharges to treat small quantities of highly-concentrated wastewater.

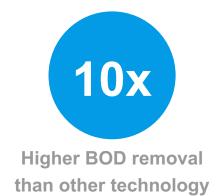
Our systems thrive on this challenge.



Biological
Oxygen Demand
(BOD) removal



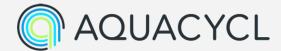
Hour treatment time



#### 12 ways Aquaycl's BETT® system saves money

- Treats wastewater up to 150,000 mg-BOD/L
- 2 Reduces treatment times
- Improves methane generation in anaerobic digesters
- 4 Reduces energy consumption
- Enables remote monitoring and control
- Reduces treatment footprint

- 7 Allows for process variability
- 8 Reduces sludge management
- 9 Reduces toxicity events onsite and at the POTW
- 10 Eliminates or reduces CapEx
- 11 Reduces OpEx
- 12 Makes system design more efficient



# How it works

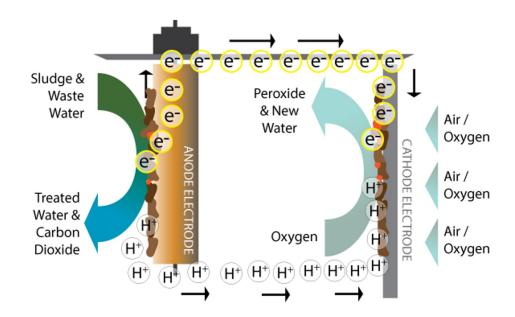
Aquacycl®'s BioElectrochemical Treatment Technology (BETT®) uses natural, locally-sourced, bacteria in a fixed film fuel cell reactor to accelerate wastewater treatment rates, eliminate primary sludge, minimize secondary sludge and produce direct electricity.

The wastewater and associated bacteria are fed to the BETT reactors and the bacteria form biofilms on the interior surfaces of each BETT reactor. As the bacteria consume the organic matter in the wastewater, they release electrons which are removed using the Anode and captured in the reactor circuits to produce direct electrical current.

The electrical current can be harvested by trickle-charging battery packs and using the batteries to power Aquacycl equipment, making BETT an energy neutral system.

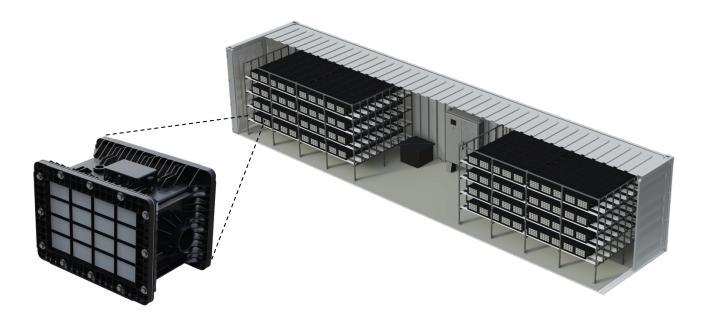
The more electrical current that is produced, the bacteria breathe faster, which means they will eat faster and increase treatment rates. In short, more electricity production means a faster treatment rate.

The system is modular, with BETT reactors that are about the size of a standard car battery, all stacked together like LEGOs® inside a 20-foot shipping container that sits outside of the facility.





# How BETT® systems are applied



Aquacycl's BioElectrochemical Treatment Technology (BETT®) systems

## Industrial pretreatment

For companies that already have onsite wastewater treatment BETT systems make all downstream treatment more efficient. We treat small volumes of highly-concentrated wastewater, making aerobic and anaerobic wastewater systems more efficient.

2 Standalone system
For companies that are paying high surcharges or trucking costs, BETT systems can treat wastewater to levels that can be discharged to sewer without additional fines, allowing companies to maintain compliance with their permit limits.

### Distributed wastewater treatment

BETT systems can be used with complementary technology to enable onsite wastewater treatment or reuse where no sewer connection is available.

