



The lagoonQUBE is a flexible fabric structure designed to float on a lagoon or tank to create biogas for uses such as heat, hot water, electricity, or transportation fuel - quick, efficient, and easy to install and operate.

The lightweight modules are assembled on land and then easily pulled onto the surface where they are floated into place and tethered. The hexagonal design means that multiple lagoonQUBE's can fit together to cover as much of the lagoon or tank surface as is required.

A heating and mixing systems can be suspended from the floating structure to enhance the natural biogas production processes in the lagoon or tank. The biogas is captured in the dome and used for on-site heat and power generation.

A value-added function is that rainwater falling on the lagoon surface can be intercepted by the cover and then pumped away, decreasing the volume required to be land applied.



### Who Can Use It ?

Anyone that employs lagoons or open top tanks to store volatile liquids. Examples include:

- ✓ Where there is a desire to maximize asset value, mitigate emissions, and to produce energy for internal or external consumption.
- ✓ Livestock and poultry operations with on-site manure storage lagoons or open top tanks.
- ✓ Industrial, agricultural, or municipal waste water treatment operations with open lagoons for aeration, processing, or storage.
- ✓ Lagoon and industrial slurry management service providers seeking to extract value prior to land application.

### Valuable Biogas Production & Use

The lightweight structures will move with the natural changes in the lagoon level or tank and are removable to allow for normal maintenance and the climatic conditions, where required.

The lagoonQUBE can produce valuable biogas to:

- ✓ Produce renewable energy in the form of electricity when combusted in a CHP cogeneration unit.
- ✓ Use the cogeneration heat to produce hot water for facility washdown needs.
- ✓ Create an alternative transportation fuel to natural gas or diesel
- ✓ Reduce the GHG emissions associated with lagoon operations.

## How Does It Work?

