

# Culture BioSystems LandAlgae 10000

**Culture BioSystems** is an equipment provider. We sell, operate and service cultivation platforms for 1 to 10 acre projects.

The technical process to convert sunlight into algae and then into fuels has been tested by industry and approved by regulators. The current challenge is to produce commodities such as fuels and feed at a competitive cost.

There are two principal ways of cultivating algae today – open ponds and closed photobioreactors – and both face significant challenges to produce algae biomass at an appropriate cost, so that this can then be converted into commodity products.

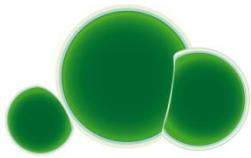
Culture BioSystems has developed a hybrid technology platforms that takes the best of both traditional cultivation methods – a low-cost, closed system that can be deployed on the ground (**LandAlgae**). This improved engineering design allows for the production of cost-competitive products using natural algae strains. The Culture Fuels cultivation system works with any algae strain and final product market.

The main benefits of the **LandAlgae** system versus open ponds are:

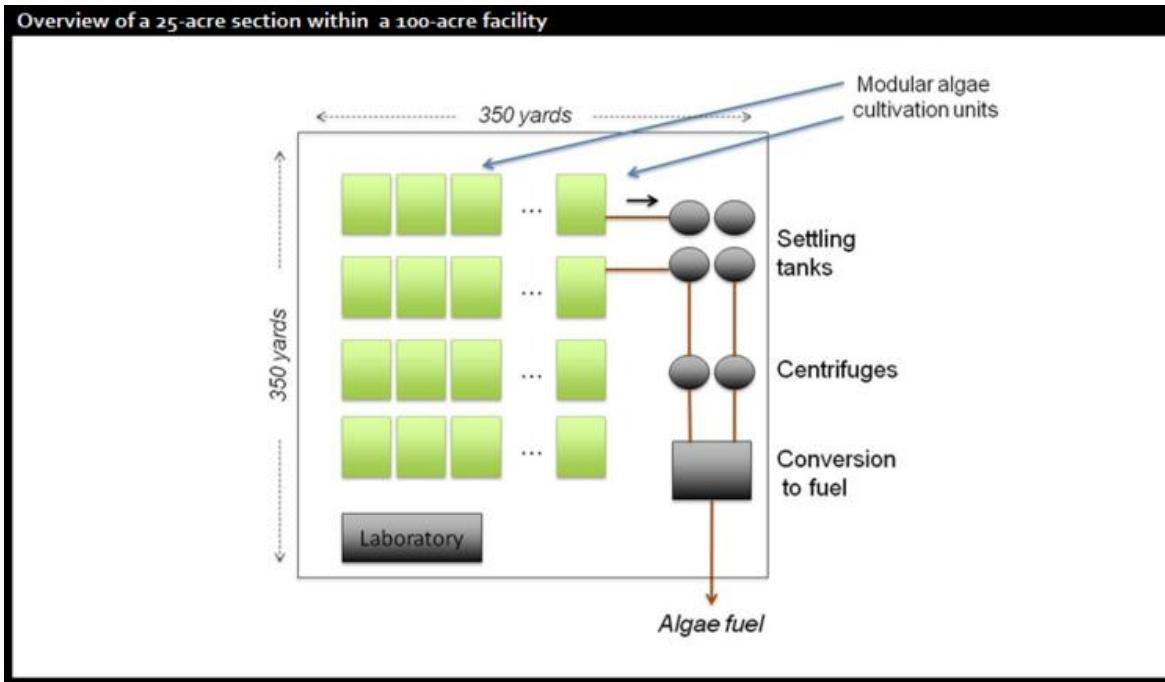
- Minimizes impact of rainfall on culture and nutrient concentration
- Increases contamination barriers so that algae do not escape and external predators do not enter
- Produces higher biomass density due to shallow water depth (to lower dewatering cost)
- Quick installation and disassembly of reactor modules

## LandAlgae 10000





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## LandAlgae 10000 Technical Data

### Capacity:

- 10,000 Liters algae culture

### Production:

- Biomass produced annually: ~1,000 kg (~2,200 lbs)

### Dimensions:

- Length: 40 meters
- Depth: 5 cm

### Power requirements:

- 110W, 60 RPM motor
- Runs on 110V

### Main materials:

- Majority of platform is made of 2 sheets of polyethylene welded together
- Metal propulsion system to stir culture

### Process:

- Successful cultivation of *Nannochloris* and *Isochrysis*
- Achieves high density due to short light path
- Currently used Width: 5 meters
- with semi-continuous harvest (~60% of culture every 6 days) but could be continuous

### Delivery:

- Metal propulsion system (package is 3 meter long tube)
- Polyethylene packed in a crate
- Small accessories