



THE LINK TO SUCCESS WITH ADVANCED ENGINEERING AND SCIENTIFIC TECHNOLOGY



## ALGAE TO ENERGY

*"FEEDING AND FUELING THE WORLD"*

MISSING LINK TECHNOLOGY, LLC

**POSSESSES THE ONLY AVAILABLE COMMERCIALY SCALABLE ALGAE TECHNOLOGY**

*THE UNIVERSE IS FULL OF MAGICAL  
THINGS PATIENTLY WAITING FOR OUR  
WITS TO GROW SHARPER*

**THE LINK TO SUCCESS WITH ADVANCED ENGINEERING AND SCIENTIFIC TECHNOLOGY**

# ***Algae technology changing the world ...***

## **THE DEVELOPMENT OF OUR ALGAE TECHNOLOGY SPANS TWO DECADES**

We are a technology and product development company established in 2006 to acquire and develop new technologies. Our mission is to provide the business and commercial link to success with advanced engineering and scientific technology, all the while protecting our environment. We are exploiting a portfolio of over 20 cutting edge, patented and patent pending technologies in the algae, biofuels, alternative energy, waste water and other industrial markets. The company has acquired and developed breakthrough technology that allows for the full world-wide commercialization of algae through its technology, including; MicGro

Deep Water Process, MicGro Deep Water Reactor, Shepherd Harvester, Alginator and Algaefaction product and service offerings.

*Algae to Energy* is Missing Link Technology, LLC's official DBA/Brand for the licensing, marketing and commercialization of the Company's algae-based technologies. Key product areas include; waste water reclamation, algal biomass, algal oil and algal biocrude for the expansive food, specialty chemicals/oils and fuel markets of the world which face environmental, national security and scarce resources for food, oils and fuel and nitrate, phosphate, metals and endocrine disrupting pollutant remediation.

## ***Our technology & processes were developed directly to address the three major algae commercialization barriers; growing, harvesting and extracting algae products economically on a commercial scale ...***

### **GROWING – *MicGro Reactor / Process***

The key to our design is our BioReactor's unique ability to optimize photosynthetic energy capture resulting in production rates exceeding 98 grams/m<sup>2</sup>/day; over 100mt/acre/year.

The MicGro Process consists of "Closed Systems" incorporating the optimal combination of continuous CSTR/Plug flow reaction kinetics.

- ▲ Harnesses photosynthesis to grow algae, capture CO<sub>2</sub> and produce high-energy biomass in the High Density Reactor.
- ▲ First company to break the 10 foot algae growth "shade wall" barrier.
- ▲ Closed BioReactor systems designed and operating at depths of up to six feet in depth.
- ▲ Results in 5X+ capital reduction over nearest competitor.



### **HARVESTING – *Shepherd Harvester***

Algae harvesting process that eliminates the hydraulic transport requirements for harvesting algae @ 0.8% of current performance levels.

- ▲ The keys of our process are; 1) harvesting the algae without pumping large volumes of the algal reactor contents, and 2) collecting the concentrated algae & subsequent treatment to

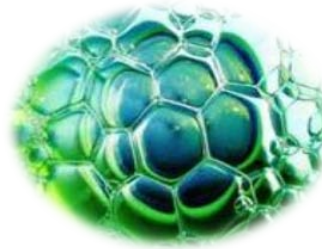


## EXTRACTION – Conversion to Products

### Algae BioMass

After we grow and harvest the Algae BioMass it can be processed directly into marketable products.

- ▲ Dewatered and dried into feedstock for the livestock and aquaculture markets.
- ▲ Established and mature \$ Billion markets annually in the U. S. alone.



### Alginator – DHA / Omega 3/6 Oils

Algal oil extraction technology using rapid non equilibrium decompression.

- ▲ Utilizes energy efficiently from within the cell.
- ▲ Incorporates all MLT technologies resulting in oil maximizing and extraction making it the low-cost/low-energy solution.
- ▲ Supplies established \$ Billion markets annually in the U. S. alone.



### Algaefaction - BioCrude

Continuous conversion of algal biomass into a “light” biocrude to be processed through existing refineries.

- ▲ A proprietary catalyst that when mixed with algae, heated and pressurized will produce a hydrocarbon feedstock through the process.
- ▲ Most cost-effective catalytic process for the conversion of algal biomass directly into BioCrude.
- ▲ Supplies established \$ Trillion markets annually in the U. S. alone.



## Technology Partnerships ...

### WORLDWIDE EXPERIENCE

MLT provides Eco-Solids International Limited with the exclusive world-wide and patented rights, outside of North America, for two leading-edge wastewater and sewage sludge treatment technologies.



These process technologies are for the effective treatment of organic feedstocks and contaminants, to provide energy recovery, material recycling and waste treatment.

[www.ecosolids.com](http://www.ecosolids.com)



### PARTNER PROFILE

Any industrial and commercial entity whose processes emit CO<sub>2</sub>, waste heat, waste water, and other chemicals such as phosphates and nitrates that can be utilized by our integrated solution.



### INDUSTRY FOCUS

Our portfolio consists of completed, developing and prospective partners in the algae, power generation, gas pipeline and ethanol industries.

Our partners are required to meet the Partner Profile above and bring land, capital, expertise water, a commitment to making a difference in the world and creating value for their stakeholders.



### OUR MISSION

Developing and commercializing technologies and processes that not only address the problems facing the world today; but rather change the face of the world with our technology and commitment to a better tomorrow.



**MR. SAM SHEPHERD**  
INVENTOR  
CHIEF TECHNOLOGY OFFICER

*After achieving patented and patent pending breakthroughs in algal growth, kinetic modeling, harvesting and extraction, we embarked on exploiting these BioMass processes in the BioFeed, BioOil and BioCrude markets.*

- Algae BioMass is the most promising BioFeed, BioOil and BioCrude feedstock that does not raise food prices, sequesters carbon dioxide and has the potential for tremendous biomass and oil yields.
- For the better part of this century, our team has diligently determined the ideal mix of; choices of algal subspecies, optimization methods of growing the biomass in controlled, low-cost bioreactor design, use and capture of carbon dioxide, maximum 'turnover' balance between oil content and algal growth rate, proprietary technology used to harvest the algae from water and proprietary technology used to 'crack' the algae and free the oil from the organism's cellular container.
- We are in development with partners and are the first company to produce algal products economically on a commercial scale.
- MLT's technology will have a tremendous impact on the promise of algae, more specifically on the growth, harvesting and extraction technologies which truly are a "paradigm shift" from the current technologies available.
- Our technology, experience, ingenuity and expertise position the company on the fore-front of the green feed and fuel industries.

*Missing Link Technology, LLC has a strong and growing foundation of development partnerships around the world and the US engaged in commercializing our portfolio.*



THE LINK TO SUCCESS WITH ADVANCED ENGINEERING AND SCIENTIFIC TECHNOLOGY

**TECHNOLOGY**

**ENGINEERING**

**CONSULTING**

**ALGAE**

**WATER/WASTE WATER TREATMENT**

**CO2 SOLUTIONS**

**OFFICES / PROJECT SITES**

TEXAS

CALIFORNIA

FLORIDA

ARKANSAS

MISSISSIPPI

RHODE ISLAND

OREGON



**CONTACT US**

Tel (281) 907-9708

Fax (281) 596-7210

[info@missinglinktechnology.net](mailto:info@missinglinktechnology.net)

[www.missinglinktechnology.net](http://www.missinglinktechnology.net)

[www.algaetoenergy.com](http://www.algaetoenergy.com)