

June 2015

**Patented Fiber Reactor™
Profile & Opportunity**

KPS Partners, llc.

www.alterenergygroup.com

- ◆ KPS Partners, LLC (KPS) was incorporated in 2010 in Austin Texas for the purpose of commercializing the Fiber Reactor™.
- ◆ KPS has an exclusive license from Chemtor LLC to the Fiber Reactor™ technology for processing EtOH corn oil.
- ◆ KPS holds First Rights to the Fiber Reactor™ for all other fields of refining bio-based oils.
- ◆ KPS is optimizing the Fiber Reactor™ for the start of oil based bio-fuel application commercial production in Q4 2015.

➤ **Fiber Reactor™**

- Proven in the Oil and Gas industry for 38 years. Now being proven in the liquid bio-fuels industry;
- Protected by **US Patent # 7,618, 544**; International patents pending;
- The patented Fiber Reactor™ technology improves quality, throughput (continuous flow), and efficiency of refining lower grade natural oil feedstock materials including but not limited to:
 - Acid Crude Oils
 - Waste Cooking Oils
 - Crude Vegetable Oils
- **The Fiber Reactor™ reduces Capex 35%** by eliminating the need for centrifuges, mixers and settling tanks (4MMGPY);
- **The Fiber Reactor™ reduces Opex by 37%** on average per gallon of biodiesel production(4MMGPY);
- Producing distillable food grade corn oil for export increases margins by eliminating the Capex for biodiesel production and provides a finished product with a higher market price abroad than the US biodiesel market.
- Katzen Engineering (www.katzen.com) made a site visit to the Fiber Reactor™ test facility in December 2014. After reviewing the patent filings, the site visit, and meeting the engineers they rated the technology 9 out of 10.

➤ **Problem Statement**

- Conventional refining results in losses in three main areas:
 - Mechanical mixing and separation creates inefficiencies in natural and recycled oil refining;
 - Inefficiencies lead to yield loss for food oils and biodiesel supply;
 - Biodiesel is produced from food grade oil.

➤ **KPS Proforma (financial model available)**

KPS Pro Forma, USD						
Year	1	2	3	4	5	Total
Revenue	7,300,616	15,786,114	18,363,454	22,089,974	22,359,974	85,900,131
COGS	6,188,513	12,305,095	13,737,545	16,217,645	16,298,645	64,747,442
OPEX	443,621	1,412,524	1,841,911	2,115,333	2,176,977	7,990,366
EBITDA	668,482	2,068,495	2,783,998	3,756,996	3,884,352	13,162,322
EBITDA %	9.16%	13.10%	15.16%	17.01%	17.37%	15.32%

➤ **Business Opportunity**

- USA
 - The new US Renewables Fuels Standard mandates 36B gal/a of biofuels production by 2022;
 - Q4 2015 - 1st installation targets 1 x 1.2MMGPY Biodiesel as part of an integrated Biofuels Refinery;
 - Q1 2016 - 2nd installation targets 2 x 5MMGPY Acid Corn Oil (ACO) production on operating Ethanol Refineries.
- Europe
 - The EC Renewable Energy Directive mandates 10% biodiesel and ethanol production for Member States by 2020;
 - Many biodiesel and ethanol plants yield low margins or have ceased operations due to losses;
 - The Fiber Reactor™ is profitable where conventional technology is not;
 - More plants online reduces greenhouse gas emissions to meet quotas set by the Directive;
 - The Fiber Reactor™ can also produce low food grade corn oil for sale to certain EU markets.

➤ **Investment Performance – \$2.10MM USD Equity or Convertible Note (term sheet available)**

- Tranche 1 – \$600k USD
 - 500kGPY 2 stage Acid Corn Oil Fiber Reactor installation at an existing, operating biodiesel refinery;
- Tranche 2 – \$1.45MM USD
 - 10MMGPY 2 stage Cottonseed Oil Fiber Reactor installation at an existing, operating cotton plantation.

EBITDA Investment Valuation	
NPV, 15%	\$952,786
IRR	28%
Payback, yrs.	2.00

