

1.2MMGPY Fiber Reactor™ Project Summary

Project Company (SPV)

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- ◆ The SPV will be structured as Joint Venture between AltEn and AEG or designees thereof.
- ◆ Acquire 100% of the first biofuel FR commercial installation with 1.2MMGPY installed capacity (1.4MMGPY design capacity).
- ◆ Acquire up to 25% equity ownership in KPS Partners, llc. (KPS).
- ◆ Exclusivity for additional Fiber Reactor™ (FR) installs in the US with KPS and AltEn.
- ◆ First Rights for additional FR installation investments with AltEn and the SPV Joint Venture partner.

KPS Partners, llc.

- ◆ 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.

➤ 1.2MMGPY Fiber Reactor™ Biodiesel Project

- Southwest Research Institute (SwRI) will provide the Detailed Design Package for the 1.2MMGPY installed capacity Fiber Reactor™ biodiesel skid upon payment of \$15,000 USD;
- Initial funding of \$250,000 USD will initiate the manufacturing of the long lead items that require 90 days;
- The 1.2MMGPY biodiesel skid will be delivered fully operational and commissioned within 120 days of funding;
- The 3 stage Fiber Reactor™ system yields ASTM grade biodiesel in a 3 stage process from acid corn oil (ACO);
- The Project will include the installation of a process flow master switch between the 2nd FR and the 3rd transesterification FR to allow for the extraction of marketable food grade corn oil;
- **Fiber Reactor™ reduces capital expenditures 35%** by eliminating centrifuges, mixers & settling tanks (1.2MMGPY);
- **Fiber Reactor™ reduces operating expenditure 30%** on average per gallon of biodiesel production (1.2MMGPY);
- The SPV may also secure acid corn oil (ACO) and other waste oils from third party suppliers to meet installed capacity;
- Depending on price points the SPV may produce food grade corn oil to diversify revenues and increases margins;
- Provided all connector pipes and infrastructure are in place installation can be done off-cycle within 48 hours.

➤ Conventional Biodiesel 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.

➤ Projections

1.2MMGPY Fiber Reactor™ Biodiesel Proforma					
Year	1	2	3	4	5
Revenue	3,744,253	4,168,253	4,260,953	4,356,434	4,454,779
COGS	2,613,948	2,925,890	3,013,667	3,104,077	3,197,199
EBITDA	1,130,305	1,242,362	1,279,633	1,318,022	1,357,563
EBIT	958,536	1,070,594	1,107,865	1,146,254	1,185,794
Investment FCF	-1,202,380	1,242,362	1,279,633	1,318,022	1,357,563
Cumulative Inv. FCF	-72,075	1,170,288	2,449,921	3,767,943	5,125,506

Project Company (SPV) Revenue Streams

- Produce 1.2MMGPY ASTM Grade biodiesel using feedstock from the Mead ethanol refinery and third party ACO;
- ASTM grade biodiesel generates 1.5 D4 RINs per gallon produced;
- Option to produce food grade corn oil in addition to or in place of biodiesel;
- Low food grade corn oil trades at \$0.20-0.30/pound more than the ACO produced by ethanol plants;
- The 2 stage FR system can separate out the FFA's from the neutral oil in the 1st FR, the 2nd FR will remove the Moisture, Impurities and Unsaponifiables (MIU's), and the 3rd Transesterification FR produces ASTM grade biodiesel;
- Using a Fiber Reactor™ to clean EtOH CO enough to meet these standards would add \$0.20-0.25/pound on average;
- Dividends from the equity ownership in KPS Partners, llc. (5 year Proforma available).

➤ Investment Performance

- Total Cost: \$1.2MM USD (Term Sheet available)

EBITDA Valuation*	
NPV, 15%	2,406,298
IRR	53%
Payback, yrs.	1.56

*Assumes 5 month installation

