REACH Technology for Biomass Conversion to Drop-in Hydrocarbon Jet Fuel and Diesel

Karl Seck CEO Mercurius Biofuels Bellingham, Washington

Mercurius was formed in 2009, and was established to produce profitable drop-in fuel (Jet Fuel and Diesel) from non-food biomass feedstocks. Through a process of novel applications of existing technology, Mercurius is developing a non-fermentation, non-alcohol based, *"faster ~cheaper~ better"* method of producing profitable drop-in biofuels. Mercurius uses a proprietary, patent pending technology called Renewable Acid-hydrolysis Condensation Hydrotreating ("REACH") to make profitable drop-in hydrocarbon liquid fuels. In April 2013, the Company was awarded a \$4.6 million grant by the Department of Energy ("DOE") to build its pilot plant currently planned for Michigan.

Mercurius simultaneously addresses five key issues:

- The urgent need for a reliable, economic, scalable, domestic drop-in biofuels;
- The production of biofuels within a highly profitable business platform absent any subsidies;
- The ongoing need to produce biofuels from non-food biomass feedstocks;
- The reduction of economically unsustainable dependency on foreign oil;
- The production of fuels with a near carbon neutral method.

The Mercurius hydrocarbon jet fuel and diesel will be drop-in compatible with existing fuel infrastructure. It can also produce a diesel range, high cetane additive for diesel blenders. In addition, Mercurius will produce high-value, specialty chemical products including: furfural, formic acid, and ethyl levulinate.