Company Backgrounder

Maverick Synfuels converts low-value feedstocks, such as biomass, municipal solid waste (MSW), and methane-rich gas streams, into high-value petroleum-replacing transportation fuels and chemicals. Maverick's unique spoke-and-hub distributed production model can be deployed in many locations around the US and the world. The spoke-and-hub model creates opportunities that reduce feedstock cost, improves feedstock availability, reduces capital requirements, and minimizes technical and financial risk.

Technology
Maverick's process converts feedstock to product via a methanol-to-olefins ("MTO") process or a direct-to-olefin intermediate process (Olefinity). The MTO process is well-understood, and uses catalysts which are commercially-available. Our Olefinity™ process involves thermochemical and chemical processes that have not been previously combined into a single process. Each of the major steps is commercially available and currently used to produce other commodities.

Feedstocks
Maverick's process is feedstock-flexible, and can accept biomass, municipal solid waste (MSW), and methane-rich gas streams.

Development Facilities
Maverick's development facilities and engineering team are designed to support commercial project deployment. Maverick has completed initial engineering studies and demonstrated olefin production at the pilot scale. Maverick plans to construct its first small-scale commercial plant shortly after completing olefin conversion (producing mixed alcohols and/or jet fuel) at the pilot scale. Our engineering efforts for the first plant will be leveraged as we design future plants, and our use of modular components will facilitate scale-up.

Maverick at a Glance

Founded: 2008

Industry: Specialty chemicals and transportation fuels

Technology: modular thermo-chemical and chemical production platforms

Products: methanol, biodiesel, mixed-alcohols, propylene

Competitive Advantages:

- Feedstock flexible
- Olefinity™ technology
- Hub-and-spoke distributed production
- Feedstock arbitrage
- High-value, high-demand products

Funding: Venture funded, privately held

Facilities:

- Park Research Center, RTP, NC
- Topline Energy Plant, Brooksville, FL
- Colorado Plant, Denver, CO

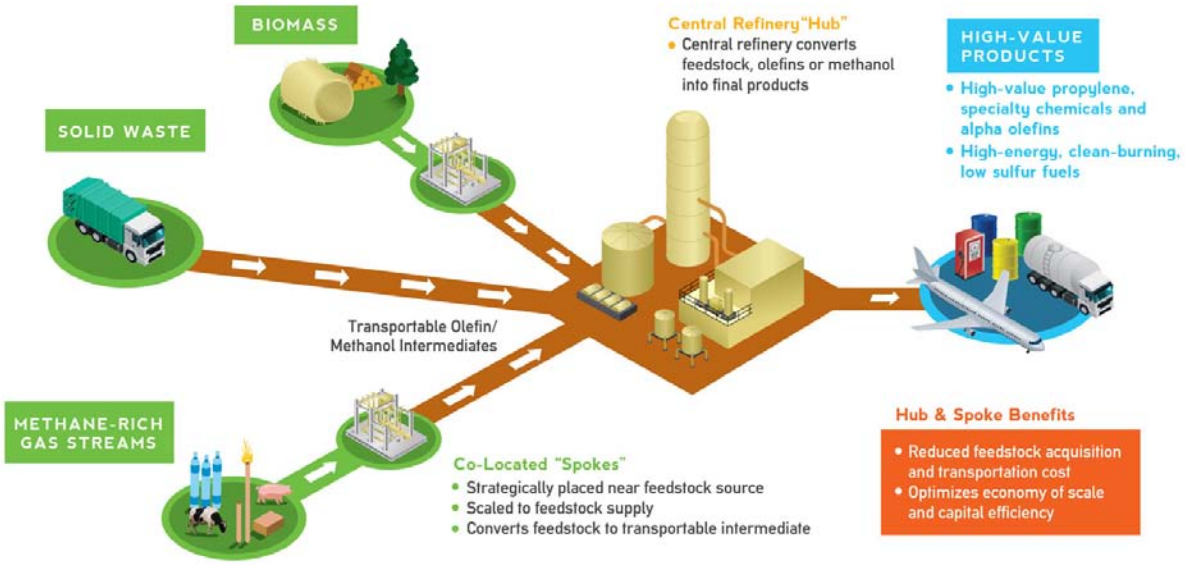
Employees: 10

Website: www.mavericksynfuels.com

Contact: info@mavericksynfuels.com

Distributed Production
Maverick's plants are designed to be both modular and scalable to local feedstock supply and economics. Smaller distributed 'Spoke' feeder plants are scaled based on the availability of smaller quantities of low-cost, non-commoditized feedstock supply. This approach eliminates the demand pressures on feedstock supply and keeps the feedstock costs low.

Our spoke-and-hub logistics model and transportable intermediates also enables Maverick to engage in feedstock arbitrage, allowing Maverick to take advantage of imbalances in feedstock supply and demand to drive down the cost of feedstock for our processes.



Products

Maverick's primary products are diesel/jet fuel, propylene (polypropylene) and mixed alcohols. Secondary products include methanol, bio-LPG, and heat or steam at larger refineries.

Intellectual Property

Maverick has been awarded a patent in South Africa for production of alcohol blend usable in flexible fuel vehicles via Fischer-Tropsch Synthesis. Patents are pending in U.S., Brazil, India, Europe, and the Philippines. An additional U.S. patent is pending for production of polypropylene from renewable resources. Maverick also holds patents for production of mixed alcohols from methanol via an olefin intermediate. Additional patents are pending on process steps and technology.

Management Team

Maverick Synfuels is managed by an experienced start-up team and experts in organic chemistry, biofuels, and chemical engineering.

Licensing Opportunities

Maverick is pursuing a hybrid business model that consists of licensing the technology to strategic partners along with eventual building and operating production facilities with various partners. Maverick will produce and sell end commodity products into the specialty chemicals and transportation markets and/or derive revenue from selling equipment, know-how, services, and/or entire refineries.