FLIGHT PATHS

A wide variety of fuel feedstocks and processes are aiming for the aerospace market

| COMPANY | FEEDSTOCK | JET FUEL INPUT | TECHNOLOGY | PARTNERS |
|----------------------|--------------------------------|---------------------|---------------------|---|
| ENERGY CROP FIRMS | | | | |
| Agrisoma Biosciences | Carinata | Vegetable oil | HEFA | UOP |
| SG Biofuels | Hybrid jatropha | Vegetable oil | HEFA | Bunge, Flint Hills Resources |
| AltAir Fuels | Camelina | Vegetable oil | HEFA | UOP, Boeing |
| | | | | |
| BIOFUELS FIRMS | | | | |
| Amyris | Cane sugar | Biofarnesene | Direct fermentation | Total |
| Gevo | Corn sugar, cellulose | Isobutyl alcohol | Alcohol-to-jet | U.S. Air Force Research Lab |
| KiOR | Biomass | Hydrocarbon | Pyrolysis-to-jet | Hunt Refining |
| Lanzatech | Waste gas, lignin | Ethanol | Alcohol-to-jet | Swedish Biofuels, Boeing, Virgin Atlantic |
| Sapphire Energy | Sunlight, CO ₂ | Algal oil | HEFA | Boeing |
| Solazyme | Cane sugar | Algal oil | HEFA | Dynamic Fuels, United, U.S. Navy |
| Virent | Sugar, cellulose | Hydrocarbon | Unknown | Shell, U.S. Department of Energy |
| | | | | |
| REFINING FIRMS | | | | |
| Neste Oil | Camelina, jatropha, animal fat | Vegetable oil, fats | HEFA | Lufthansa |
| Rentech | Forest waste | Synthesis gas | Fischer-Tropsch | Ontario government |

HEFA = hydrotreated esters and fatty acids. SOURCES: Company information, UOP