

Alternative Jet Fuel Production Facilities Status*

Company	Activity	Process	Fuel	Feedstock	ASTM Specification	Facility Location	Status	Expected Entry into Service	In Service	Expected capacity (MGY)
AltAir	Fuel production	Hydroprocessing (HEFA-SPK)	Diesel and jet fuel	Vegetable oils and animal fats	Yes	Paramount, CA	Commercial Jet Operation	2014	Yes	38.00
Anellotech	Technology	Thermochemical with high-temperature catalyst	Jet fuel	Lignocellulosic biomass (pulp wood)	No	Silsbee, TX	Pilot Project	2017	Yes	
D'Arcinoff Group	Production	Fischer-Tropsch - (FT-SPK) Hydrotreating	Jet Fuel, Diesel, Naphta	Natural gas, cellulosic biomass	Yes	Hudspeth County, TX	Planned Commercial-Jet Capable	2021	No	459.90
Emerging Fuels Technology	Technology	Fischer-Tropsch - (FT-SPK) Hydrotreating	Diesel, jet fuel	Natural gas, MSW, bio-derived oils	Yes	Raleigh / Durham, NC	Demonstration		Yes	
Fulcrum Bioenergy	Technology / production	Fischer-Tropsch (FT-SPK) Thermochemical-Gasification	Diesel Jet fuel	MSW	Yes	Sierra BioFuels Plant, McCarran, Nevada	Under Construction	2020	No	10.50
Fulcrum Bioenergy	Technology / production	Fischer-Tropsch (FT-SPK) Thermochemical-Gasification	Diesel Jet fuel	MSW	Yes	San Francisco, CA area	Planned Commercial-Jet Capable	2022	No	30.00
Fulcrum Bioenergy	Technology / production	Fischer-Tropsch (FT-SPK) Thermochemical-Gasification	Diesel Jet fuel	MSW	Yes	Los Angeles, CA area	Planned Commercial-Jet Capable	2022	No	30.00
Fulcrum Bioenergy	Technology / production	Fischer-Tropsch (FT-SPK) Thermochemical-Gasification	Diesel Jet fuel	MSW	Yes	Denver, CO area	Planned Commercial-Jet Capable	2022	No	30.00
Fulcrum Bioenergy	Technology / production	Fischer-Tropsch (FT-SPK) Thermochemical-Gasification	Diesel Jet fuel	MSW	Yes	Chicago, IL area	Planned Commercial-Jet Capable	2022	No	30.00
Fulcrum Bioenergy	Technology / production	Fischer-Tropsch (FT-SPK) Thermochemical-Gasification	Diesel Jet fuel	MSW	Yes	NJ area	Planned Commercial-Jet Capable	2022	No	30.00
Fulcrum Bioenergy	Technology / production	Fischer-Tropsch (FT-SPK) Thermochemical-Gasification	Diesel Jet fuel	MSW	Yes	Houston, TX area	Planned Commercial-Jet Capable	2022	No	30.00
Gevo	Technology	Fermentation (ATJ-SPK)	Isobutanol, ethanol	Sugars	Yes	Luverne, MN	Commercial Jet Operation	2013	Yes	19.16
Red Rock Biofuels	Production	Fischer-Tropsch (FT-SPK) Thermochemical-Gasification	Diesel and jet fuel	Forest residues, corn stover, bagasse, switchgrass, algae	Yes	Lakeview, OR	Planned Commercial-Jet Capable	2020	No	15.00
SG Preston	Production	Hydroprocessing (HEFA-SPK)	Diesel, jet fuel	Oils & fats	Yes	South Point, OH	Planned Commercial-Jet Capable	2020	No	240.00
Synsel (SHELL CRI-GTI /IH2 process)	Technology	Pyrolysis	Gasoline, diesel, jet fuel	Lignocellulosic biomass (wood waste and forest residue)	No	Ontonagon, MI	Planned Commercial-Jet Capable	2020	No	
Synsel (SHELL CRI-GTI /IH2 process)	Technology	Pyrolysis	Gasoline, diesel, jet fuel	Lignocellulosic biomass (wood waste and forest residue)	No	Lumberton, MS	Planned Commercial-Jet Capable	2020	No	
Velocys	Technology, FT reactor	Fischer-Tropsch (FT-SPK) Thermochemical-Gasification	Jet fuel	Woody biomass	Yes	Natchez, MS	Planned Commercial-Jet Capable	2020	No	19.00
Vertimass	Technology	Alcohol-to-Jet (ATJ-SPK)	Diesel, jet fuel, gasoline	Ethanol (sugars)	Yes	Weymouth, MA	Pilot Project	2017	Yes	0.00
Virent	Technology	Aqueous Phase Reforming (Bioreforming®) Hydro-deoxygenation (HDO-SK and SKA)	Diesel, jet fuel, gasoline	Sugar beets, sugarcane, corn starch, bagasse, corn stover, grasses, wood	In process	Madison, WI	Demonstration	2013	Yes	0.01

* As of June 2018