



The Rentech Process (rentechinc.com) uses a technology that converts from biomass and fossil resources into **synthesis GAS** (Hydrocarbons + CO + CO₂) that can then be processed and upgraded into **ultra-clean diesel and jet fuel**, synthetic fuels, specialty waxes, etc. The starting raw resources include: natural gas, biomass, municipal solid waste, petroleum coke.

At the core of Rentech is their enhanced use of the **Fischer-Tropsch FT** process. This production process, when viewed in its entirety, is a multi-step series of processes: **biomass to SYNgas to clean liquids to ultra clean liquids and fuels**.

Step 1 - Carbon-bearing resources such as bio-mass or coal are converted into synthesis gas, a combination of hydrogen and carbon monoxide.

Step 2 - The synthesis gas is then sent through a FT reactor containing a catalyst where its converted back to an ultra-clean liquid hydrocarbon.

Step 3 - This initial ultra clean Liquid product is then separated and upgraded into jet fuel, diesel fuel, naphtha, and other specialty fuels.

Step 4 - CO₂ is used for EOR enhanced energy recovery or storage + waste heat is converted into other re-usable energy such as electricity.

The Rentech Process

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