

HEBF Technology, Western Biofuels, Inc.

www.westernbiofuelsinc.com

1. High Energy BioFuel (**HEBF**) Technology is an advanced method to produce **state of the art BioFuels** from any animal or vegetable fat and oil or their fatty sub-products, including non-edibles like tallow and free fatty acids.
2. High Energy BioDiesel (**HEBD**) is an environmentally friendly fuel, having 4% less CO₂/BTU than Petro-Diesel, and **7% less CO₂/BTU** than FAME Biodiesel.
3. HEBD is **100% Green**, and as opposed to FAME Biodiesel. HEBD does not pollute with fossil, redundant CO₂ emissions like FAME, which has a hidden carbon footprint.
4. HEBD has a high **Enthalpy level, par to Petro-Diesel**, and is 12% higher Energy than FAME Biodiesel. This amounts to significantly higher mileage.
5. A wide variety of cost-effective feedstock can be used, from **raw natural oils**, to **free fatty acids**, to **tallow**, without suffering physical or chemical incompatibilities.
6. HEBF process can be run in a **continuous** or semi-continuous fashion, as opposed to FAME's batch-wise operations.
7. HEBD offers all the advantages of other BioDiesels, including **excellent lubricity**, high **cetane** values, and **zero sulfur**, plus the energy punch found only in Petro-Diesel.
8. **Intellectual Property** is exclusive and proprietary.
9. It is easy to **identify HEBF products** through their unique chemical composition, which strengthens intellectual property rights.
10. HEBF Process renders **strictly fuel products**, namely, a small fraction of naphtha components, plus High Energy BioDiesel (HEBD) and High Energy BioBunker (HEBB), these last two approximately in a 4 to 1 ratio.
11. HEBF Process yields **94% fuel products** relative to fatty feedstock, replacing energy-depleting oxygen with nitrogen and raising energy to petro-fuel levels.
12. HEBD has superior **cold-flow** properties relative to FAME biodiesel.
13. HEBD does not form **gums**, as opposed to FAME biodiesel.
14. High Enthalpy BioBunker **HEBB** has **higher heat** value than petro-bunker, has superior cold-flow properties, and has **zero sulfur**. In blends, it can improve petro-bunker specs.
15. The small fraction of naphtha component (around 1%) enhances **octane** in gasoline.
16. In diesel fuel, cetane value improvements with HEBD become evident starting with dilute blends like **B5**.