



BIOHEAT: WHAT IS IT?

There is much controversy regarding bio fuels. Gasoline, diesel and heating oil can have bio-additives incorporated into them creating bio-blends. The two categories of bio fuels are ethanol (an alcohol distillate) and bio-diesel (a processed oil or fat). Which fuel is better, which is more cost effective, which one adds to our food costs or which is better for the environment? These are all pertinent questions.

Currently it is mandated that U.S. gasoline supplies have a certain percentage of ethanol blended into them. Ethanol blended gasoline is a bio fuel but very different than bio diesel and bio heat as it is blended with distilled alcohol. In the U.S. Corn is the primary crop used for the production of ethanol so as production goes up it does have a direct effect on food costs.

When it comes to bio blends for heating oil and diesel fuel there is no direct effect on food prices. Soybean oil is the primary crop for BioHeat/BioDiesel production. Not long ago this oil was a waste product when the protein was extracted from the soybeans so there is virtually no effect on food costs. As well, you get 320% more energy out of bioheat/biodiesel than you put into it.

From an emissions stand point all bio fuels are better for the environment than pure fossil fuels. Biodiesel is the only alternative fuel to have fully completed the health effects testing requirements of the Clean Air Act. The use of biodiesel in a conventional diesel engine results in substantial reduction of unburned hydrocarbons, carbon monoxide, and particulate matter compared to emissions from diesel fuel. In addition, the exhaust emissions of sulfur oxides and sulfates (major components of acid rain) from biodiesel are essentially eliminated compared to diesel.

Please check the highlighted links below for more detailed information.

- ❖ [BioHeat](#)
- ❖ BioHeat is made through a process called [transesterification](#) which converts the plant oil into Alkyl esters (BioHeat).
- ❖ Ethanol is the same alcohol that is in alcoholic beverages and is made through a [distillation](#) process.
- ❖ [BioHeat vs. Ethanol](#)