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Biofuels and its advantages

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DESCRIPTION

Biofuels are flammable fuels made from biomass. In other words, it is a fuel made from recently living plant materials, not old hydrocarbon plant materials. The term biofuel is commonly used to refer to liquid fuels such as ethanol and biodiesel, which are used as alternatives to transportation fuels such as petroleum, diesel and jet fuel. Biofuel also include solid fuels such as wood pellets and biogas or syngas, but this summary focuses on liquid fuels.

There are two main types of biofuels, ethanol and biodiesel. The easiest way to distinguish between the two is to remember that ethanol is alcohol and biodiesel is oil. Ethanol is an alcohol produced by fermentation and can be used as an alternative or additive to gasoline. Biodiesel, on the other hand, is made by extracting naturally occurring oils from plants and seeds in a process called trans-esterification. Biodiesel can be burned in a diesel engine.

Biofuels are categorized into first generation, second generation, and third generation categories based on the type of raw material (raw material) used in production. First generation biofuels are made from food crops. Raw materials for ethanol include sugar cane, corn, and corn. The starting material for biodiesel is natural vegetable oils such as soybeans and rapeseed. Second-generation biofuels are made from cellulosic materials such as wood, grass, and non-edible plant parts.

This material is more difficult to decompose by fermentation and requires pretreatment before processing. Third generation biofuels are made from algae lipid production. In addition, the term Advanced Biofuel is used to describe a relatively new field of biofuel production that uses waste products such as waste, animal fats and used cooking oil to produce liquid fuels. Biofuels are not as energy dense as traditional fuels. A gallon of biodiesel has 93% of the energy of a gallon of diesel, and a gallon of ethanol has 73% of the energy of a gallon of gasoline.

ADVANTAGES

Efficient Fuel

Biofuels are made from renewable resources and are relatively less flammable than fossil diesel. Lubricity is greatly improved. It emits less harmful carbon than traditional diesel. Biofuels can be made from a variety of materials. The overall cost-benefit of using them is much higher.

Cost-Benefit

The price of biofuels is the same as gasoline on the market. However, the overall cost benefits of using them are much higher. They are cleaner fuels, which mean less emission is generated during combustion. As the demand for biofuels grows, it may be cheaper in the future.

Renewable Resource

Most fossil fuels will eventually break down into smoke. This makes the use of biofuel in nature more efficient, as most resources such as fertilizers, corn, soybeans, crops and plant waste are renewable and will not run out quickly. In addition, these plants can be replanted over and over again.

Reduce Greenhouse Gases

Studies show that biofuels reduce greenhouse gases by up to 65 percent. Fossil fuels generate large amounts of greenhouse gases when burned high carbon dioxide in the atmosphere. These greenhouse gases trap sunlight and warm the earth. In addition, the burning of coal and oil raises the temperature and causes global warming. People around the world are using biofuels to reduce the effects of greenhouse gases.

Economic Security

Not all countries have large oil reserves. For them, oil imports mean a huge burden on the economy. If more people switch to biofuels, the country can reduce its reliance on fossil fuels. Biofuel production increases the demand for appropriate biofuel culture and boosts the agricultural industry. Vehicles equipped with fuel supplies, companies, a biofuels are cheaper than fossil fuels. The growing biofuel industry creates a further work that will keep our economy safe.

Low Pollution

When they are burned as compared to standard diesels, they resolve low carbon dioxide levels and other emissions. The use also significantly reduces particle emissions. Bio-fuel production is often used to grow carbon dioxide as by-product but to grow plants to be converted to fuel. This makes it possible to be close to the system that has confidence. In addition, biofuels are biodegradable and reduce the underground contamination and contamination of groundwater in transport, storage or in use.