

Palm Oil Based Biodiesel has greater potential for longevity

With lower energy needs to process and a lower price, palm oil is fast becoming recognised as the best feedstock for biodiesel there is.

Wolfgang Rupilius, a consultant from Germany has said that palm oil based biodiesel will have higher chances of survival under certain conditions compared with biodiesel based on canola oil or rapeseed.

He said the development of canola oil based biodiesel as the fastest growing oleo chemical products is artificial, and based on the biodiesel tax exemption.

According to studies, he added, 1.2 tonnes of fossil fuel has to be utilised to produce one tonne of canola oil based biodiesel. However, because palm based biomass is used in the heating boiler system that produces biodiesel, palm oil production did not require much fossil energy.

"By eliminating political influences and subsidies", Rupilius said, palm oil is the right feedstock and will survive in the biodiesel sector.

Producing palm oil based biodiesel is a lot cheaper than other feedstock based biodiesel. He also stated, "if you have a free economy, European biodiesel producers will stop buying canola oil and rape seed oil and instead start buying palm oil."

"Hence, I am sure some kind of restrictions will come or otherwise palm oil will take over completely the biodiesel market in Europe, which would not be accepted by the biodiesel producers and population in Europe," he added.

The cost of producing one tonne of rape seed biodiesel is 500 to 600 euros whereas palm oil based biodiesel costs far less at 150 to 200 euros.

He added that because European businesses are fully aware that the development of biodiesel depended on the tax exemption and are therefore started to think of other uses for their biodiesel plants in the event biodiesel is no longer profitable. The alternatives were either to look at more economical raw materials or to process methyl ester.

Rupilius said that new developments in the US and Europe have showed that there are more efficient methods of producing diesel from resources that are renewable and have lower total green house emissions. Methyl ester sulfonates (MES) has large potential as the petrochemical raw material alkyl benzene is pricier, commanding a price of US\$1300 per metric tonne than palm based methyl ester

The lowest cost raw material for MES manufacturing is hydrogenated palm stearins methyl ester, which is US\$500 to US\$600 per tonne and results in a product that is readily biodegradable, he added.

Manufacturers therefore do not need more reason to look to palm oil based biodiesel. With lower energy needs to process and a lower price, palm oil is fast becoming recognised as the best feedstock for biodiesel there is. Alternatives do not even come close. THE END.