

An overview of renewable fuels ethanol from cellulose and bio-diesel from conventional/algae feed status and economic options for ETBE

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Regenerating fats are bound to slowly replace the fossil elements. Biodiversity development will mark the historic transition into a sustainable society where natural feeds, processes and products form the key pillars of the economy. The energy policy to support the introduction of biofuels, including biodiesel, is taxable, subsidized and authoritative, which is not always popular. Biodiesel has received a lot of attention in recent years due to its eco-friendly environment, non-toxic properties, biodegradability and low carbon cycle compared to conventional diesel plants. Currently there are many learning and practice options, with varying degrees of success, and at different stages of study and practice. Examples include solar energy, either thermal or Photovoltaic, hydroelectric, geothermal, wind, biofuels and carbon sequences, among others. Each has its advantages and disadvantages, and depending on the location of the application, different options will be better suited. One important goal is to take steps to reduce emissions, such as the gradual replacement of crude oil with renewable energy sources, where biofuel engines are seen as a real contributor to achieving those goals, especially in the short term. Biofuel production is expected to provide new opportunities to diversify and generate electricity sources, promote rural employment, improve long-term global tides, and reduce GHG emissions, increase transit oil depletion and increase energy supply supplies. The most

common biofuels are biodiesel and bio-ethanol, which can replace diesel and gasoline, respectively, in today's cars with little or no modification of car engines. It is mainly produced from biomass or renewable energy sources and contributes to the reduction of fire emissions than fossil fuels by equal energy emissions. They can be produced using existing technologies and distributed through the existing distribution system.

RHT-ETBE and RHT-TAEE Smart suspension technology to improve conversion to 97 to 90 percent respectively by having multiple angles from the column, and one can have a much better quality than competing technology. The main advantage of these processes is that they allow liquid ethanol to be used in the process and still meet the specification of TBA and TAA in the product. The process actually rejects water from liquid ethanol and makes Ethers of higher quality Capex lower and Opex in competitive systems. The RHT-Biodiesel process is well made to produce biodiesel from palm oil, Rape seed oil, vegetable and animal products which are all strong acids with a carbon atomic value usually of at least 12 atoms -22. This biodiesel is compared to hydrocarbon diesel. Triglycerides are reacted with methanol / ethanol or high alcohol all producing biodiesel at an acceptable boiling point. Methanol is widely used in the production of biodiesel as an inexpensive alcohol, which is why it provides a better economy. After the product reacts to the

product being extracted, methyl esters of those oils / oils as the product and glycerine are produced as a byproduct. Glycerine is separated from methyl esters of vegetable oils by biodiesel by phase separation by resolving gravity due to size differences. Methyl esters and glycerine are purified to meet product specifications. The technology is able to provide this reaction and meet the high conversion rates and high selections in Capex and Opex without discharging liquid waste.

