

REVISED FEB 2011

Case Study

Biodiesel from used cooking oil

It is Greenenergy's policy to use as much biodiesel made from used cooking oil as possible. Used cooking oil derived biodiesel has one of the highest Renewable Energy Directive default greenhouse gas saving values (83%) of all biofuels.

Greenenergy owns a UCO biodiesel plant in Immingham. By working directly with the plant operators an actual greenhouse gas saving of 85% has been demonstrated. Although only a relatively small increase from the default it is important due to the quantities of UCO being processed.

Renewable Energy Directive greenhouse gas saving default: 83%

Actual value: 85%



Key carbon emission savings are achieved through:

- Reducing energy consumption by 37%.
- Improving biodiesel yield by 5%.
- Reducing chemical input requirements such as methanol.

Combined, these efficiency improvements are contributing to improved carbon emission savings. This is a significant improvement because greenhouse gas savings which are already high are difficult to improve further.

ASSUMED SAVING UNDER RED:

83%

ACTUAL SAVING:

85%