A closed loop Bio-fuel production cycle

Closed loop process

FuelMatic enables organisations to recycle and reuse their own waste oil, driving down the financial and environmental costs

If your organisation produces waste oil you have an obligation to dispose of the waste responsibly and effectively. This takes up valuable time, resource and cost. However, Green Fuels can transform the way you deal with waste oil by enabling closed loop recycling.

How Green Fuels enables closed loop recycling is simple. Our skid-based plants mean waste oil can be turned into valuable fuel onsite, rather than transported to a third party. Consequently you control the quality of your fuel, enabling you to make substantial savings on transportation costs as well as maximising sustainability.

Even the methanol is recycled

The Green Fuels FuelMatic module goes even further to create efficient recycling on-site. FuelMatic uses innovative technology to remove any residual methanol from the biodiesel after purification, offering lower operating costs than traditional distillation methods.

The extracted methanol is then reused in the next cycle, converting even more waste oil.

From small beginnings

Even smaller business operations can achieve real results – a typical restaurant would produce 300 ℓ to 400 ℓ of used oil per month.

The Green Fuels technology can provide a channel for collected used oils, is economically sustainable owing to its small scale and can help to address energy challenges. Farmers can formalise the collection of oils and the distribution of biofuels in a community, or as a co-operative venture.

There is tangible value added to local communities and the system could also be used in cities. A restaurant can operate a single delivery vehicle on the biodiesel it produces each month, while remote farmers can produce their own biodiesel and secure a portion of their fuel at a much lower cost. In London, the global consultancy PricewaterhouseCoopers runs its head office building on biodiesel produced in a Green Fuels processor from used cooking oil, as do many London taxis.