

# NZ firm successfully refines algae to produce jet fuel

The Blenheim, New Zealand-based biofuel company Aquaflow Bionomic Corporation said that its wild algae has been successfully refined to produce the world's first sample of synthetic paraffinic kerosene (SPK) converted from compounds derived from Aquaflow's wild algae. SPK, when blended with petroleum-based kerosene, can be used to power commercial and military aircraft.

"This is a major breakthrough and confirms that wild and naturally occurring algae and its components can produce quality, sustainable aviation fuel. The sample meets Jet A-1 specifications and, when blended with petroleum-based Jet A-1, could be used by commercial aircraft," said Mr Nick Gerritsen, Director, Aquaflow

The algae was converted using technology from United States-based UOP LLC, a Honeywell company. UOP utilized its proprietary hydroprocessing technology to convert the sample to SPK and confirmed that the sample meets the critical specifications for SPK including density, flash point and freeze point. The wild algae sample also yielded a sample of diesel fuel.

"We are a company focused upon developing the sustainable production of green crude, similar to that which could be expected from mineral crude oil, and combining that with waste treatment and clean water production. The announcement is a significant milestone for the aviation industry and supports the identification of algae-based fuels solutions by Boeing and leading airlines," Mr Gerritsen adds.

Aquaflow sources its wild algae from the local oxidation ponds in Marlborough, essentially recycling a waste product. Wild algae grows in wastewater and is able to be continuously harvested. It also doesn't compete with food crops or agricultural land.