

Published: 2009

Biodiesel from algae: plant gets a boost

The Australian Government is funding the South Australian-based Algal Fuels Consortium (AFC) to develop a pilot-scale, second-generation biorefinery for production of biofuels and other value added products from microalgae.



Credit: ScienceImage

AFC comprises the South Australian Research & Development Institute (SARDI), Flinders University, the CSIRO Energy Transformed Flagship, Sancon Recycling Pty Ltd and Flinders Partners.

AFC Chair, Associate Professor Rob Thomas, says the venture will produce biomass from native strains of microalgae, from which biodiesel can be produced in commercial quantities.

'At the same time, the project will produce high value by-products including Omega-3 fatty acids, bioactive peptides and carotenoids used by the nutraceutical [nutrition and healthcare products] industry,' he says.

When complete, AFC's research biorefinery will be one of the largest in Australia, and will have access to 70 researchers with expertise in algal culture, post combustion carbon capture, harvesting and dewatering, extraction and bioprocessing.

Microalgae have the potential to produce up to 10 times the volume of biofuels produced by traditional oilseed crops grown on the same land footprint. Unlike oilseed crops, however, microalgae use non-arable land, saline water, carbon dioxide, nutrients and sunlight

Because carbon dioxide is fixed by the microalgae as it grows, the plant will also help reduce national carbon emissions.

From ECOS online <http://www.ecosmagazine.com/?paper=EC151p8c>