

Report heralds new \$50 billion energy industry for Australia

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A new energy sector based on algal biofuels could guarantee Australia's transport fuel and food security far into the future, a new report says.

Potentially worth \$50 billion a year, the industry would produce fuel, food, stockfeed, plastics, textiles, paper, fertilisers, chemicals and pharmaceuticals and employ up to 50,000 Australians in new jobs, according to the study Food and Fuel Forever, released today (May 21, 2012) by Perth-based thinktank Future Directions International (FDI).

"At current yields we could produce enough oil for all our transport needs from just 6000 square kilometres, the area of a single big sheep station," says author, science writer Julian Cribb.

"Furthermore it can be done without competing for good land, wilderness or water with any other sector of the economy – in fact it will use many of the things we now waste or throw away."

More than 20 countries, including the US, China, India and Israel, along with leading airlines and aviation corporations are currently investing in research into algal biofuels as the next big [energy resource](#).

"Oil from algae is liquid solar energy. The main thing you need to grow it is sunshine – and Australia has more of that per square metre than any country on Earth. That makes us potentially the world's largest fresh oil province – the Saudi Arabia, if you like – of the 21st century.

"Fossil oil comes from algae that died millions of years ago. Today it makes far better sense to grow the oil fresh, using living water plants – and create a new industry that will invest its profits back into Australia, instead of offshoring them.

"Such an industry would not only save us \$40 billion a year in foreign [oil imports](#), but guarantee our fuel supplies into the future, and create spinoff local industries worth \$10bn or more in aquaculture, health foods, [biodegradable plastics](#), textiles, paper, fertiliser, chemicals and many other areas.

"Furthermore this would be an industry owned and run by Australians, for Australians – not by globalised resource giants.

"Instead of exporting jobs, we would be importing tens of thousands of them. It would pay for new nation-building infrastructure in transport, energy and other areas key to economic growth.

"It would help green our cities by devouring their waste streams, cleaning their water and reducing their garbage. It would turn the emissions from power stations, cement works and factories into valuable products and exports.

"Because fish and water plants are healthy to eat, it would help to bring down the burden of degenerative disease and premature death across the entire community, giving rise to a new national diet and a novel cuisine."

Mr Cribb says he wrote the report after more than four decades of analysing agricultural and resource opportunities and issues. "Of all the opportunities I have seen algae culture is one of the most promising. Not only does it offer major benefits – but it also solves major problems.

"For example it can cut national greenhouse emissions by 15-20 per cent

at a single stroke. It can cleanse our badly polluted waters. It can improve our health as a nation."

Other countries and leading global corporations clearly see algae as a major opportunity, and it was time that Australia took them seriously, as it had the land, water, sunshine and skills to become a world leader in the field.

"As with any new industry, there are large technical challenges and risks involved in algae culture on a large scale. As with any new industry, these can be overcome with science, patient investment, intelligence – and guts," he said.

The Chief Executive Officer of Future Directions International, Maj. Gen. John Hartley, said "The concept of algal farming, as described by Julian Cribb, could well have far reaching consequences for Australia's economy, environment, employment and population generally. This is an exciting prospect worthy of great consideration."

The full paper can be found on the Future Directions website at: [futuresdirections.org.au/public ... nd-fuel-forever.html](http://futuresdirections.org.au/public...nd-fuel-forever.html)

Provided by SciNews

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