



SUBMISSION TO THE SENATE RURAL AND REGIONAL AFFAIRS AND TRANSPORT COMMITTEE INQUIRY INTO AUSTRALIA'S FUTURE OIL SUPPLY AND ALTERNATIVE TRANSPORT FUELS BY NATURAL FUELS AUSTRALIA LTD (NFAL).

Introduction

Natural Fuels Australia Ltd. (NFAL) is an unlisted public limited company owned 50% by Natural Fuel Ltd. of Perth, WA, and 50% by Babcock & Brown Environmental Investments Ltd. (BEI). BEI is owned 26% by Babcock & Brown and 74% by public shareholders and institutions, and is listed on the Australian Stock Exchange.

NFAL is currently constructing a biodiesel manufacturing plant in the Darwin Business Park, NT, adjacent to the recently-completed oil industry terminal operated by Vopak. Total investment by NFAL and Vopak in the biodiesel plant plus associated tankage, infrastructure and working capital, is approximately \$90 million. The plant is due to be commissioned in October, 2006.

Biodiesel is an alternative clean-burning fuel made from renewable resources by reacting the fatty acids in vegetable oils or animal fats with methanol. It is biodegradable and can be used as a fuel in its own right (B100), or as a blend in any proportion with petroleum diesel. The Darwin plant will use a variety of vegetable oils to make 147 million litres of biodiesel and 14,000 tonnes of pharma-grade (99.5% pure) glycerine per year. NFAL has commissioned the Charles Darwin University to conduct a Biodiesel Demonstration Program to prove the benefits of using this fuel in road transport, mining, power generation and marine applications.

The Chief Minister of the Northern Territory, Clare Martin, has welcomed this development as "...an exciting proposal that will see over 100 jobs created during the construction phase and 20 permanent positions", and one which reinforces the Territory's potential to become a major international oil and gas hub.

Report of the Biofuels Taskforce to the Prime Minister, August, 2005

This Report provides a useful summary of the emerging role of biofuels as a component of transportation fuel needs around the world, including the target set by the Australian Government of 350 million litres of biofuel use (ethanol and biodiesel) in Australia by 2010. The Report sets out many of the economic, social and environmental issues involved in achieving that target which will not be canvassed here ; however, it is clear that the sensible use of biofuels, as a component of the nation's fuel requirements, can help reduce pollution and greenhouse gas emissions, and improve security of fuel supply. The Report notes that some form of initial Government assistance is required, as has been the case in every country of the world where biofuels have been introduced to capture the benefits of their use. For its part, the Australian Government has put in place a number of measures to achieve this, including effective excise relief on biodiesel from 2006 to 2011 and reducing thereafter.

The Report further notes that “.....there are real and significant risks associated with market entry, facing both fuel suppliers and biofuel producers”. NFAL has assessed these risks, and has made its decision to proceed with construction of the Darwin plant using the most proven technology in the world by Lurgi of Germany. The company is also considering a second plant in Sydney, which the NSW Government has already declared a Project of State Significance.

NFAL's preference is to distribute biodiesel from these plants within Australia, but if consumer uptake is slow, or is by inhibited by false information as occurred in the case of ethanol, the product will be exported to other countries where biodiesel demand is high.

Method of Operation

Certain characteristics of finished biodiesel are influenced by the feedstock used, especially cold flow properties. As in any oil refinery, the economics of operating a biodiesel plant will depend on feedstock availability and cost, the cash costs of running the plant to convert the feedstock into biodiesel according to the product specifications required, and the price achievable for the product at the plant gate. All of these variables have to be optimised at the time of operation in order to generate earnings.

In the case of NFAL, the Darwin plant will use approximately 130,000 tonnes per year of vegetable oils out of a total world supply of 120 million tonnes, and will make biodiesel strictly according to the *Australian Fuel Standard (Biodiesel) Determination 2003, as amended*. The price achievable at the plant gate for biodiesel will be influenced largely by the prevailing price of petroleum diesel in the marketplace, which in turn will depend on the price of crude oil.

Use of Feedstocks

Some of the smaller biodiesel plants to be established in Australia will use a combination of tallow (animal fat) and used cooking oil (of mixed origin) as feedstock. With Australian tallow production of approximately 550,000 tonnes per year (of which 350,000 tonnes is exported), plus estimated used cooking oil supplies of around 50,000 tonnes per year, the sources of non-vegetable oil feedstocks are necessarily limited. For biodiesel to make any appreciable impact on the available diesel fuel pool in Australia, biodiesel producers will have to look to a range of vegetable oils (e.g. canola oil, soybean oil, cotton seed oil, sunflower oil, palm oil) as feedstock.

Currently, Australia has a total edible oil requirement of around 400,000 tonnes per year, which can barely be met from local oil seed crushing capacity. A small portion (approx. 28,000 tonnes) is exported. The climatic and soil conditions, plus the lack of copious water supply in most parts of the country, seem to work against the agronomy of high oil bearing seed crops. The advent of new varieties and more research might change this in time, but for the moment biodiesel producers will have to look to imports to help satisfy their needs.

NFAL Ethical Standards

Since NFAL will produce pharma-grade glycerine with a Kosher certification from its Darwin plant, animal fats and used cooking oils will not be used. Only vegetable oil feedstocks will be suitable. Since, at present, there is no viable local vegetable oil supply in the Northern Territory, this feedstock will have to be imported. NFAL will do this under a contract it has with one of the world's leading agri-business companies, viz. ConAgra Inc. of the United States. This contract requires ConAgra to source the feedstock according to the following NFAL ethical standard -

Statement of Principle

NFAL will run its Darwin biodiesel plant on an optimum mix of vegetable oil feedstocks, consistent with availability, cost, and the tenets of the Roundtable on Sustainable Palm Oil (RSPO), of which NFAL is a member.

The RSPO is a global organisation initiated in 2001 by the World Wildlife Fund for nature (WWF), and now comprises over 100 members, including palm oil growers, social and environmental NGO's, investors, oil seed processors and responsible user companies, all aimed at promoting and implementing the sustainable use of palm oil. Any palm oil used by NFAL under its contract with ConAgra Inc. will be drawn only from sources certified by RSPO as meeting its stringent requirements.

When NFAL builds its second biodiesel plant in Sydney, it will use locally-grown vegetable oils to the maximum practicable and economic extent, and will work with Governments, farming groups, and other biodiesel producers to see how a sustainable bioenergy feedstock industry can be established in Australia.

NFAL is sensitive to the ethical issues surrounding the use of palm oil, but notes that this material is already the second-largest traded vegetable oil in the world (over 30 million tonnes per year) and has been widely used for many years in foodstuffs and personal care products. Much of the industry in South-East Asia has evolved from the use of old rubber plantation sites, but further deforestation or the predatory treatment of native peoples and wildlife must be avoided. Replacement of old palm oil trees on already cleared land with new, fast-growing, high-yield varieties should help. NFAL believes that as a significant Australian buyer, it can influence events through its membership of RSPO and strict adherence to that organisation's core values, viz. –

Principles and Criteria for Sustainable Palm Oil Production

- Principle 1 : Commitment to transparency
- Principle 2 : Compliance with applicable laws and regulations
- Principle 3 : Commitment to long-term economic and financial viability
- Principle 4 : Use of appropriate best practices by growers and millers
- Principle 5 : Environmental responsibility and conservation of natural resources and biodiversity
- Principle 6 : Responsible consideration of employees and of individuals and communities affected by growers and mills
- Principle 7 : Responsible development of new plantings
- Principle 8 : Commitment to continuous improvement in key areas of activity.


Conclusion

Australia has the unenviable reputation of being the highest per-capita emitter of greenhouse gases in the world. Governments everywhere are struggling to balance economic development with sustainable ways to reduce impacts on global warming.

NFAL recognises that its plans for Darwin and Sydney are only a small part of that effort, but the company has taken the risk to invest in renewable fuels and intends to conduct its operations to the highest ethical and environmental standards. Sustainable feedstock selection will be an important part of those standards.

NFAL would be happy to discuss these matters with the Inquiry at your convenience.

Yours faithfully



R N Selwood
CEO
Natural Fuels Australia Ltd

Perth,
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