

BIOENERGY NEWS

August 2007



FEATURE ARTICLE:

Force 10

New Zealand's smallest oil company launched last month the first commercial biofuel to hit the nation's service station forecourts – a petrol blended with ethanol made from milk whey.

Gull's Force 10 biofuel is a blend of premium gasoline containing 10 per cent ethanol produced by dairy cooperative Fonterra.

It will be sold at Gull petrol stations.

Biofuel is any fuel derived from biomass, recently living organisms or their metabolic byproducts, such as manure, forest or crop waste, or even pond scum.

In February the Government set a national target of 3.4 per cent for the biofuel component of petrol and diesel in 2012. Oil companies will have to start offering biofuels from April 1 next year, and the Government has said there will be no excise tax charged on the ethanol.

Prime Minister Helen Clark – who has previously announced that New Zealand has the potential to lead the world in renewable energy – formally launch the Gull product at North Harbour stadium. The official first fill-up was set for Gull's Greville Road petrol station in Albany.



Ms Clark said in a statement the Government was pleased to see an easily accessible and practical biofuel that motorists could use everyday.

"We are serious about providing motorists with real choice and leading the way in reducing greenhouse gas emissions," she said.

Fonterra's Edgecumbe dairy factory in the Bay of Plenty successfully tested petrol mixed with 10 per cent ethanol in a 1.8-litre car, in a blend approved by the Environmental Risk Management Authority (Erma).

The Edgecumbe plant produces 30,000 litres of ethanol a day and over five million litres in a dairy season. Fonterra also produces ethanol at other plants, including Reporoa and Tirau, for use in industrial cleansers, vodka and gin.

Gull – a family-owned operation with 30 petrol stations in the North Island – signed on Fonterra in 2004 to produce ethanol to be added to "premium" petrol. Blending of petrol and ethanol will take place at Mt Maunganui.

It will be pitched to New Zealand drivers of recently-imported vehicles wanting to run the family car on a "green" fuel, according to the general manager of Gull New Zealand Dave Bodger: "If there's no downside for the choice, middle New Zealand will go for the green option".

He said Gull was responding to public demands for better choice in the retail fuel sector. The Force 10 blend will be included in the Progressive Enterprises supermarket chains' discounts on fuel purchases.

Gull Petroleum chief executive Wayne Ferrell said petrol with the bio-ethanol additive would not only lower greenhouse gas emissions but would give motorists more power and a higher performance while cleaning their car's fuel system.

The Force 10 fuel will initially be sold at Gull forecourts in Albany, Kingsland, and Wiri, and will later be rolled out to most of its 30 sites.

NZPA

NEWS BRIEFS:



German Biofuels Criticised

Biofuels have stood for a long time in the firing line of critics on the basis of their energy balance, while the **Federal Office for Environmental Protection** has also criticised the promotion of bio diesel from a climate protection point of view. Now the **German Council of Environmental Advisors (SRU)** are also asking questions about bio fuels: The SRU advises the Federal Government in its latest special report "**Climate Protection Through Biomass**" to align the national promotion for the bio energy sector more strongly to its climatic protection goals.

In the special states the SRU states that **biomass in the heating as well as the combined heating and power production is three times more efficient** and can be used substantially more economically than with the production of the current biofuels, bio diesel and bio ethanol. The national target of 17 % energy from biofuel sources weakens the promotional efforts of the Renewable Energy Sources Act enhances imports – that is politically difficult to control a development at the expense of natural resources in third world countries.

Biomass Research Centre



Leipzig is to become the location for a new "German Biomass Research Centre" (DBFZ) based on the decision of the **Federal Ministry for Nutrition, Agriculture and Consumer Protection**. A close co-operation with the research facilities from the federal state is planned. Up to 80 jobs are to be created.

The research centre will concentrate on the **energy usage of renewable raw materials**. The research on conditioning and conversion as well as conversion in power, heating and biofuels (e.g. power station technology, heating and motor technology) should be the main focus. It must be remembered that the new recommendation from the German Council of Environmental Advisors (SRU) may have an effect on the focus strategy of the new research centre.

Biofuels Enquiry Announced

The Environmental Audit Committee (EAC) is to hold an inquiry into biofuels and their potential role in addressing the issues of fuel security and climate change. The EAC announcement follows the recent publication of the United Nations report '*Sustainable Bioenergy: A Framework for Decision Makers*,' which stressed the need for the development of a biofuel strategy to minimise the potential for negative environmental and social impacts. The inquiry would: explore the economic, social and environmental impacts of biofuels; examine the role biofuels might play in improving fuel security and reducing greenhouse gas emissions; review the policy arrangements for biofuels; and explore whether safeguards are in place in order to minimise negative social and environmental impacts.

UK Biofuels PR campaign

Increasing negative press towards biofuels, inspired by NGO fears that the Government was not being firm enough on carbon and sustainability standards and food feed industry

concerns over the rising costs of their raw materials, has persuaded the Renewable Energy Association in the UK to mount a responsible PR campaign.

"While we have been happy to respond to media interest within the constraints of our resources, it is clear that the voice of biofuel producing interests is not being properly heard. A number of REA members have therefore approached us with a request that the REA consider running a PR campaign using the services of an outside Agency.

"We have discussed this and believe this would be a sensible course of action for a number of reasons:

- The DfT's Carbon and Sustainability Consultation will end on 13 September, so we can expect a crescendo of further (negative) coverage as this date approaches;

- The party political Conferences start on 16 September and will run for the following 3 weeks. Biofuels will be on the agenda in the fringe meetings and the press will be much in evidence;

- The House of Commons Environmental Audit Committee will receive written evidence for their enquiry "Are biofuels sustainable?" by 1 October and will be taking oral evidence in public through the autumn;

- The RTFO Order will be laid in Parliament on or around 8 October, and there will be debates on both the House of Commons and the House of Lords thereafter;

- The negative press thus far has already unsettled Ministers and parliamentarians are becoming increasingly worried;

- We cannot afford to have the Government's commitment to biofuels derailed by misleading press coverage.

"The REA has been very careful to maintain an open dialogue with the NGO community over the years and more intensively this year. While on a number of issues we have agreed to disagree, it is important that this dialogue continues. A campaign would therefore seek to "put biofuels into perspective" and to counter the misleading press coverage."

Biodiesel from RapeSeed

Solid Energy's biodiesel arm is "quietly confident" it will get enough cropping farmers to plant oilseed rape for a 1500ha biofuel trial in

the South Island.

Its operating division, Biodiesel New Zealand, plans to have the first crop sown in mid-October. Contract rates will vary depending on where the crop is grown, and incentives are being introduced to make it competitive with autumn-grown rotation crops.

Once a crop has received a positive moisture test, the company will pay 80 per cent upfront, with the remainder received by the farmer when its weight is confirmed.

The company will pick up transport costs and compensate farmers, in a staggered payment, for crop storage.

Rape-oil farmers will not have to pay for the cost of seed until the crop has been harvested.

Farmers are sought from North Otago and Canterbury south of the Ashburton River and north of the Waimakariri River and as far south as Southland.

Parts of Mid-Canterbury, however, are off-limits to prevent rape seed straying into export vegetable-seed crops.

Biodiesel New Zealand's general manager, Paul Quinn, said the company would use only contracted crops grown with seeds they supplied.

The company would not buy spot crops or rape oil from non-contracted growers.

"I want to be clear that we will not be contracting crops in Mid-Canterbury areas where export vegetable-seed growing is most concentrated."

He said the company's agronomist would check that farmers were maintaining growing distances and abiding by the Seed Quality Management Authority's seed-crop isolation distance (SCID) scheme.

Contracted crops have to be registered with the scheme.

Quinn said the trial would allow the arable-farming community to assess the crop's benefits. Rape-oil contracts would be competitive with other rotation crops, he said.

The chairman of the Grains Council of New Zealand, Andrew Gillanders, said farmers were looking at the rape-oil trial positively because Biodiesel New Zealand had worked with the cropping industry and researchers.

"If (growing rape oil) is possible and profitable, farmers will do it.

"They are prepared to look at it on a small scale and not affect other industries until research is done."

The Foundation for Arable Research (FAR) will evaluate the potential of biodiesel crops and sound out oilseed rape's benefits and value as a break crop, with research to begin next year.

Quinn said grower interest had been strong, with two to eight inquiries a day from farmers.

"We would like to think that inside of two to three years we would have 20,000ha to 30,000ha of

canola in rotation," he said.

The trial will reveal more about processing oilseed rape for biodiesel foodstock and how its by-product performs as an animal food, as well as providing costs and potential yields for farmers.

Biodiesel New Zealand manufactures about 1 million litres of biodiesel a year at an Addington plant in Christchurch, from used cooking oil.

Tim Cronshaw, The Press



The Bioenergy Association of New Zealand Inc. (BANZ) comprises companies, research organisations and individuals who have an interest in markets for converting biomass or biowaste into energy. To receive this newsletter regularly contact the Executive Officer of BANZ for membership details by email: info@bioenergy.org.nz. Back issues of this E-zine are on the website, www.bioenergy.org.nz

EVENTS CALENDAR:

International Training Workshop on Technology and Utilisation Biomass Gasification, Yingkou, China, 1-20 September

Yongzhi Ren, Biomass Gasification Department, Liaoning Institute of Energy Resources (LIER), Yingkou, Liaoning Province, P.R. China.

Website: <http://gasifiers.bioenergylists.org/yinkougasworkshop07>

International Bioenergy, Jyväskylä, Finland, 3-6 September

The main organizer is FINBIO - The Bioenergy Association of Finland.

Website: <http://seminaarit.ohi.fi/default.asp?seminarID=6>

Renewable Energy Association, Bioenergy 2007, Oxford, England, 20-21 September

Website:

www.r-e-a.net/content/images/articles/REA%20Bioenergy%202007%20Brief.pdf

UK Biofuels Conference, Newark, 17-18 October

Website:

www.biofuelsmedia.com

10th World Ethanol Congress, Amsterdam, 5-8 November

Website:

www.agra-net.com/worldethanol

20th World Energy Congress, Rome, 11-15 November

Theme "Energy Future in an Interdependent World"

Biogas Markets, 27-28, Brussels, 19-20 November

BANZ AGM, Rotorua, 22 November.

In association with Forest Residues Workshop.

Biofuels Congress & Exhibition, Brussels Expo, 12-14 March, 2008