



MEDIA RELEASE

WEDNESDAY 14TH DECEMBER 2011

FROM WASTE BIOMASS TO ADVANCED REFINERY- READY CRUDE OIL IN LESS THAN 30 MINUTES

A major airline and a global publication paper company have already expressed strong interest in a new Australian invention that can turn waste biomass into valuable, refinery-ready bio-crude oil within a 30 minute proprietary transformation technology called 'Catalytic Hydrothermal Reaction' (CAT-HTR).

Virgin Australia has today signed an MoU to work with Licella on exploring the potential of the new system to create an alternative, sustainable source of jet aviation fuel.

Upon inspecting and officially opening the Demonstration Plant at Somersby north of Sydney today, the Federal Minister for Resources and Energy, Hon Martin Ferguson announced that Norske Skog Australasia and Licella have formed a new joint venture company called Licella Fibre Fuels (LFF).

LFF has the exclusive global license to CAT-HTR technology to transform multiple biomass feedstocks, including forestry residues, agricultural waste and energy crops into bio-crude oil.

This exciting joint venture will hopefully lead to construction of a large-scale 'second generation' bio-crude oil production plant in either Australia or New Zealand and planned continual expansion globally.

Licella and Norske Skog have also been working closely with New Zealand Trade and Enterprise and Air New Zealand for opportunities for the technology in New Zealand.

The CAT-HTR Commercial Demonstration Plant at Somersby is the result of 3 years of successful trials of an earlier Pilot Facility.

Licella's bio-crude oil is an advanced renewable equivalent to fossil crude oil and has the benefit of being able to be dropped into existing refinery infrastructure. If constructed, the first commercial-scale plant could produce up to 500,000 barrels of bio-crude per annum, ideally suited to being refined into second generation biofuels including petrol, diesel and jet fuel.

Second generation biofuels do not rely upon food crops as production feedstock and are widely regarded as the most viable near-term supplement to petrochemical refineries' growing heavy dependency on imported fossil fuel products.

It is anticipated that the CO₂ life cycle emissions from the bio-crude oil will be 60 per cent less than fossil fuels.

Rob Lord, Director of Norske Skog Industries Australia said the company had been interested in emerging technologies for the production of biofuels for some time and was therefore very pleased to be a partner in the Demonstration Plant.

"This is an exciting opportunity and it is good to see such close cooperation between different sections of industry and Government.

"We look forward to reviewing the results of the planned trials over the next 12 months and hopefully progressing things further from there.

"There is still much work to be done, but this plant is an important step forward in scaling up the technology to a commercial level," Mr Lord said.

Minister Ferguson also announced that Licella and Virgin Australia have entered an MoU to jointly explore potential for an eventual commercial off-take agreement for sustainable jet fuel refined from Licella's bio-crude oil.

Virgin Australia is collaborating with a number of interested parties to research and develop bio-derived renewable fuels that can be used to progressively replace conventional aviation fuels.

Virgin Australia Group Executive of Operations Sean Donohue said Licella represents a promising step towards a local aviation biofuel industry.

"By pioneering the use of water technology, Licella's CAT-HTR offers a cleaner, faster and more cost-effective alternative to processing biomass that is the first of its kind in the world. We were particularly drawn to Licella because its activities support Australian jobs, rural communities and our natural environment.

"Virgin Australia's strategy on sustainable aviation fuel is to work with a range of stakeholders across the industry - we know there will be no "magic bullet" and that creating financially viable biofuel will involve a range of feedstocks and processes".

Licella's parent company, Ignite Energy, has determined that Licella will become an independent entity that will continue to exclusively focus on the commercialisation of bio-crude production projects in the Australasian region and around the world.

"Licella's potential fast-track through to large-scale commercialisation of our break-through, wholly Australian CAT-HTR technology and associated systems, bears testimony to the high level of commitment by the private sector and by the Federal Government to finding alternate supplies of crude oil to reduce emissions and to wind back some of the \$25 billion per annum in fuel imports Australia expects to reach by 2015," said Dr Len Humphreys, Licella Chairman and the CEO of Ignite Energy.

The Somersby Demonstration Plant was partially funded (\$2.3 m) by the Federal Government's Second Generation Biofuels Research and Development Grant Program.

"While the private sector has done the heavy lifting to get us this far there is no doubt it would have been impossible to complete this potentially energy game-changing facility

without the unwavering commitment and support of the Federal Government and the Resources and Energy Minister, Hon Martin Ferguson.

“I also want to acknowledge the exceptional contribution made by our long-term advisor on CAT-HTR, Professor Thomas Maschmeyer of Sydney University.

“Today, however, we pay particular tribute to a great man who helped show us how to make our synthetic crude oil a ‘drop-in refinery-ready’ product, Dr Ian Maxwell, who sadly passed away in April,” Dr Humphreys said.

Licella CEO, Steve Rogers, said “Licella expects to form additional joint venture partnerships similar to the one with Norske Skog with suppliers of sugar cane waste and algal biomass in order to ramp-up bio-crude oil production through construction of future large-scale commercial production facilities.

“Should this occur, very significant numbers of jobs could potentially be generated in regional Australia and New Zealand in the process and we look forward to achieving that outcome,” Mr Rogers said.

Ends

NOTE TO EDITORS

WHO: The Federal Minister for Resources and Energy, Hon Martin Ferguson and representatives of Norske Skog Australia; Virgin Australia; TRUenergy; Ignite Energy and Licella, in addition to other invited guests.

WHERE: 56 Gindurra Road, Somersby NSW 2250 (near Gosford an hour north of Sydney)

WHEN: The event begins at 11am Wednesday the 14th of December 2011.

You are welcome to attend. If you would like to send a media representative and haven't already let us know, please call Jackie Holt at Maxicom PR on (02) 9965 9300 or mobile 0422 541 075 or 0402 130 254 Thank you.

MEDIA ENQUIRIES

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