



## Bioenergy Association of New Zealand - Workshop 'Biogas as a Transport Fuel'

18<sup>th</sup> November 2010

HERA House, 17-19 Gladding Place, Manakau City, Auckland

Biogas is the most versatile renewable energy resource, capable of providing heat, electricity as well as being a transport fuel. The scope for increasing biogas production and use in New Zealand is significant, however so far most schemes have exclusively focused on the provision of local heat and electricity. The use of biogas as transport fuel does offer the highest value proposition, but requires specialist biogas processing equipment, vehicles and the right local or regional setting. The technology required for the use of biogas as vehicle fuel has advanced very rapidly in recent years and in combination with the raising cost of fossil fuels, now make biogas a practical, and economically viable transport fuel alternative, which is particularly relevant for New Zealand's agricultural, waste management, communal, and agricultural processing sectors.

Internationally the use of biogas as transport fuel is increasing rapidly, particularly in Europe, where countries such as Sweden now derive over 2% of national road transport fuel demand from biogas, with future growth forecast to be very rapid. In many western countries the rapid uptake of alternative transport fuels is spurred by demands to find practical alternatives to increasingly hard to obtain, costly and polluting imported petroleum. Derived from domestic waste and by-products biogas transport fuel has a superior environmental food print compared to almost all other transport fuel alternatives, and is most applicable to heavy transport and fleet vehicles.

New Zealand companies are actively involved in the build-up of overseas biogas vehicle fuel schemes, supplying world leading equipment and services. New Zealand entities with biogas resources potential as well as transport fuel users have much to gain from the international experience of these Kiwi companies, and first steps have been taken to start introducing biogas vehicle fuel technology on our shores.

The workshop will showcase innovative biogas vehicle fuel technologies and feature New Zealand based biogas experts speaking on the topics of biogas purification, biogas logistics, biogas vehicle conversions, gas vehicle fleet management as well as financial and legal aspects. The event will feature a field trip to a biogas vehicle fuel pilot project, providing conference participants with an opportunity to experience the technology face to face in the field. The workshop will be an excellent opportunity to meet with people in the industry and learn from their experiences. It will help biogas resource owners to better evaluate their energy potential and future options for biogas use in vehicles, and provide them with a better understanding of framework conditions that provide for the successful and economically viable use of biogas in vehicles.

This event is presented in association with



**Bioenergy Association of New Zealand**  
**'Biogas Transport Fuel'**  
**18<sup>th</sup> November 2010**

<b>8.00 am</b>	<b>Registration</b>
9.00 am	<b>Conference Opening</b> Brian Cox, BANZ Executive Officer Guenter Wabnitz, BANZ Biogas Interest Group Convener

**The BTC biogas vehicle fuel demonstration project at the Redvale landfill**

9.20 am	<b>Why can biogas transport fuel make sense for a landfill operator?</b> Logan Dingle, Transpacific Industries
9.45 am	<b>Greenlane's biogas upgrading technology – the Manuka plant at Redvale</b> Don Duff, Greenlane Biogas
10.15 am	<b>Dual-fuel technology for using biogas in diesel trucks</b> Harvey Reid, DieselGas International Ltd.
10.45 am	<b>RUC and excise tax issues for alternative fuels including biogas</b> Tony Frost (MoT)

**11.05 am** Bus transport to Redvale landfill – finger lunch provided for bus tour

**Site visit**

12.05 pm	<b>Tour of the Redvale landfill, biogas upgrading plant and biogas truck</b> Host: Logan Dingle, supported by Don Duff, Harvey Reid and Stephan Heubeck
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**13.15 pm** Bus transport back to HERA Building

**Managing gas vehicles**

14.15 pm	<b>The in's and out's of operating a gas vehicle fleet</b> Craig Worth, Go-bus Hamilton
14.40 pm	<b>Lessons from the past – The biogas transport fuel project at the Christchurch Wastewater Treatment Plant in the 1980's</b> Mike Bourke, Christchurch City Council
15.05 pm	<b>An overview of different international development programs for gas fuelled vehicles</b> Keith Jones, Uniservices

**15.30 pm** Afternoon Tea

**Future outlook**

15.50 pm	<b>Potential options for biogas transport fuel use at a farm level</b> Rocky Renquist, Crop&Food / Loren Poole, (Bioform Ltd)
16.15 pm	<b>World trends in biogas upgrading – a report from the VDI biogas upgrading congress in Frankfurt, Germany</b> Stephan Heubeck, NIWA
16.40 pm	<b>Panel discussion</b> All speakers answer questions from the audience Chair: Guenter Wabnitz

**17.30 pm** Workshop Close