



### Dear Bioenergy Association Members and friends

**Welcome to BANZ BIO-FLASH.**

***Lead Story - Global  
Potential for Bioenergy  
Sufficient to meet Global  
Energy Demand***

A position paper by World Bioenergy Association (WBA) based on a report by the Department of Energy and Technology at the Swedish University of Agricultural Sciences (SLU) shows that the global potential to produce biomass for energy in a sustainable way is sufficient to meet global energy demand.

The estimated potential for bioenergy production is 1 135 – 1 548 EJ (ExaJoule) in 2050, based on different scientific studies. The global energy consumption is 490 EJ today, and could reach well over 1 000 EJ in 2050, according to IEA projections. **The position paper and the report can be downloaded from <http://www.worldbioenergy.org/content/news-and-comments-wba>**

- There is a ***lack of awareness of the enormous potential of bioenergy worldwide*** both among politicians, media and the public, says **Kent Nyström**, president of World Bioenergy Association.
- We have to present these facts to the political leaders in Copenhagen since Bioenergy must play a major role in the strategy to combat climate change, he says.

#### **Comments from WBA board members:**

**Bioenergy has clear advantages compared to other technologies.** It is available in all societies and all communities. There are many small scale and inexpensive bioenergy solutions that can be implemented directly, says Prof. S.C. Bhattacharya, International Energy Initiative, India.

**Bioenergy is cost effective.** We can solve many environmental problems in society by using waste products and by products from food industry, agriculture and forestry, as well as household waste, says William Holmberg, American Council on Renewable Energy (ACORE), USA.

According to the report, ***the largest potential for bioenergy comes from biomass production on surplus agricultural lands and degraded lands.*** The current use of biomass for energy is only 50 EJ, around 10 percent of global energy consumption. Bioenergy crops are grown on 25 million hectares, which is only 0.19 percent of the world's total land area and 0.5 percent of the total agricultural land.

Event Focus	Date and Location
Bioenergy Options Conference	Tuesday 9 <sup>th</sup> February 2010, Wellington
Wood Pellets – Retailer focus	Thursday 18 <sup>th</sup> February 2010, Rotorua
Wood Fuels (2 day event)	Wednesday /Thursday 10 – 11th March 2010, (Dunedin and Otago)
Liquid Biofuels (back to back event with EECA Biofuels and electric vehicles conference on the preceding day)	Thursday 22 <sup>nd</sup> April 2010, Wellington
Biogas from Municipal solid and liquid waste (with EMANZ)	Wednesday 13 <sup>th</sup> May 2010, Christchurch
Biogas as a transport Fuel	November

**BIOENERGY OPTIONS CONFERENCE** – BANZ is facilitating the preparation of a **New Zealand Bioenergy Development Strategy**. With the completion of the Scion led Bioenergy Options research project BANZ has taken up the results of that research to develop an industry led sector strategy. This is being done in conjunction with NZ Forest Owners Association and government agencies. As part of the programme of work BANZ will be holding a conference in Wellington on **9th February 2010** to present the results of the Bioenergy Options project and to present a picture of the opportunities that are arising from bioenergy over the next decade. If you are interested in being an active participant in the bioenergy sector and want a clear picture of the opportunities available to you then you should book this conference into your diary now.

**WASTE TO ENERGY** – BANZ has established a project to look at opportunities for conversion of municipal organic wastes to energy. If you are interested in this topic we would welcome hearing from you.

*Liquid Biofuels –  
Issues of Interest*

**BANZ Media Statement - Biodiesel Grant Scheme is a success** - Following Labour's recent criticism of the Biodiesel Grant Scheme, Liquid Biofuels Interest Group Committee has advised that the current biodiesel assistance scheme is producing benefits and giving confidence to the emerging biodiesel industry. Full media statement [here](#).

**Algae 2020: Biofuels Markets, Strategies, Players, and Commercialisation Outlook** - 460 pages, published June 2009 - [www.emerging-markets.com](http://www.emerging-markets.com)

**Demonstration project for converting wastewater algae to biocrude oil Open.** Gerry Brownlee, Minister of Energy and Resources, on November 20th opened the project hosted by the Christchurch City Council at its wastewater treatment plant. The project was carried out by the National Institute of Water and Atmospheric Research (NIWA) and initially funded by the Foundation for Research

Science and Technology. The biocrude project combines NIWA's scientific expertise on advanced wastewater treatment and algal production pond technology with Solray Energy's biocrude oil conversion technology. The Christchurch wastewater treatment plant has devoted 5 hectares from its 230 hectares of polishing ponds and developed them to produce high volumes of [algae](#). Algae collected are then transferred to Solray's specially designed supercritical water reactor which then converts it to biocrude oil. The resulting biocrude can then be refined to liquefied petroleum gas, petrol, kerosene and other oil-based products. The production of [biocrude](#) from wastewater algae enables renewable fuel production combined with inexpensive, energy efficient wastewater treatment, nutrient renewal and the reduction of greenhouse gases. At the launch, the Minister was also put to work when petrol distilled from the biocrude was used to fill a lawn mower which he then started and proceeded to mow some grass. The project aims to harvest between 150 tons to 300 tons of algae per annum from which 45,000 liters to 90,000 liters, or 275 barrels to 550 barrels per annum, of biocrude via Solray technology. [Solray Energy](#) is a joint venture combining the chemical engineering skills of Solvent Rescue and the mechanical engineering skills of Rayners.

**Canada puts biodiesel to cold-weather railway test** - For the first time, biodiesel will be used to power the Canadian cold-weather rail service, putting to test issues on the feasibility of using the fuel as biodiesel is known to have a slightly higher freezing point than standard diesel. More [here](#).

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*Biogas –  
Issues of Interest*

**BANZ Biogas web-site** now available at [www.biogas.org.nz](http://www.biogas.org.nz)– this web-site has recently been developed as a portal for access to biogas information in NZ. The BANZ EO and the Biogas Interest Group Convener (Guenter Wabnitz) would be happy to receive your suggestions for additions.

**Biogas as a Transport Fuel** - BANZ Biogas Interest Group Committee is considering establishment of a project to get the use of biogas as a transport fuel back onto the mainstream energy agenda.

If you are interested in this topic we would welcome hearing from you.

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*Wood Pellets –  
Issues of Interest*

**BANZ Technical Guidance Documents – currently in preparation** (contact [connie.crookshanks@bioenergy.org.nz](mailto:connie.crookshanks@bioenergy.org.nz) for more details):

- Guidance Document for Wood Pellet Boiler Operators
- Guidance Document for Conversion of Solid Fuel Boilers from Coal Fired to Wood Pellet Fired

**Wood Pellet Training**

May 2010 – Dedicated Wood Pellet Boiler Operators Course [Schools] – in the planning – Rotorua in May 2009.

**Wood Fuel –  
Issues of Interest**

**Wood Fuel Testing Guidelines** – Tender on GETS – response due by 16<sup>th</sup> December 2009.

**Note:** This initiative is to support the development of the Wood Fuel Classification Guidelines – Version 4 available [here](#) on the BANZ website.

**Exports of wood chips from Australia have declined 28% in 2009** – but the country is still the largest chip exporter in the world, reports the Wood Resource Quarterly – Australia, the world’s largest chip exporter, has reduced Eucalyptus and pine chip exports substantially in 2009 due to weak pulp markets in Japan. In the domestic market, pulpwood prices have increased over 13% in US dollars this year as the Australian currency has strengthened, reports the Wood Resource Quarterly.

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**Special Officer for BANZ members**

*BANZ has negotiated a special annual subscription rate to **Carbon News** for BANZ Members. A special rate of only \$199 (ex GST) for an annual subscription – a saving of \$301 per year is available.*

*Contact **Connie Crookshanks** for the promotion code and enter this code here <http://www.carbonnews.co.nz/register.asp> to receive the special offer price*

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**BIO-FLASH** is brought to you as a BANZ Initiative to improve communication throughout the bioenergy sector. The BIO-FLASH will be produced roughly fortnightly to give quick news headlines on recent and current activities and links to where the news can be read in greater depth. We welcome your contributions and will also include paid product and service announcements. If you have something that you would like others to know about then let us know.

**Advertisements for products and services are welcome. Apply for fee information.**

**Brian Cox**  
**Executive Officer**  
**Bioenergy Association of NZ**