

## WELCOME from the BANZ Executive Officer



Welcome to the latest Bioenergy News.

This issue has a Wood Pellets theme running through it as the Bioenergy Association launches its Interest Group on Wood Pellets.

Following the successful BANZ Conference – ‘*Growing the NZ Wood Pellet Market*’ – held in Rotorua 23 – 24 November 2006, the Bioenergy Association of New Zealand (BANZ) has moved to provide a focus for wood pellets. To assist this it has established a ‘Wood Pellets Interest Group’ to further the activities necessary to lift the uptake of wood pellets one of which will be to organise a further workshop for late 2008.

This is the first BANZ Interest Group to be established and will be followed by ones on Biogas and Liquid Biofuels.

The industry stands only to gain from an initiative like this. The current Government commitment to renewable energy means that there is a real opportunity to use biomass for exactly what its best placed to do and that's provide heat. Whether for residential or commercial use, wood pellets have many advantages not least their ease of use and their low emissions. This Group will give players in the Wood Pellets sector a point of focus. For its Members it will be a means of support and information to the sector. It will help the players realise their growth potential. The Group will take the lead on facilitating training and accreditation initiatives ensuring the sector works to high quality standards and giving consumers an assurance that they are getting quality systems and quality fuels.

Wood pellets and quality wood chip can be burned in highly efficient heaters and boilers that can meet the air emission limits now being set for many urban areas.

The purpose of the Interest Group is to give a central focus to the Wood Pellets Industry to share information and learn more about available technologies and key issues affecting the sale and use of Wood Pellets and Wood Pellet burners/boilers. The Group will act as a means to share information and facilitate discussion to those involved in the Industry – specifically manufacturers, importers, retailers etc of pellets and pellet burner and boiler technologies.

The ultimate aim is to grow the Wood Pellet's market in New Zealand, to ensure high quality standards for the production of pellets, the technologies that use them, and the installation of these technologies in residential and commercial applications. BANZ has also proposed a generic wood pellets promotion programme if this is supported by members of the industry. It will be organised through the Wood Pellets Interest Group.

The general public can access information about Wood Pellets specifically at [www.woodpellets.org.nz](http://www.woodpellets.org.nz) , or through the Bioenergy Knowledge Centre [www.bioenergy-gateway.org.nz](http://www.bioenergy-gateway.org.nz)

Members of BANZ interested in participating in the Wood Pellets Interest Group should contact the Executive Officer.

*Brian Cox, Executive Officer BANZ*

## This Issue:

- News from the BANZ Board
- New Zealand News Briefs
- Feature Article – Wood Pellets
- Feature Country - IRELAND
- International News Articles
- International Reports
- Forthcoming Events

## News from the BANZ Board:

The last Board meeting was 29 April. Key issues discussed included:

- Update on the Executive Officer activities
- Action Plan for BANZ work going forward
- Update on the Interest Groups
- Proposed future workshops
- 2008/09 Budget (with specific identification of Interest Group activity costs)

The BANZ Board continues to work on the Action Plan that is on the Members area of the BANZ website. Members are encouraged to view the Action Plan and provide their views on gaps, priorities etc.

***The next Annual General Meeting will be held during the evening of the 9<sup>th</sup> July in Hamilton, and preceding the Biogas workshop on the following day. Prior to the AGM specific meetings of each Interest Group will be held in which it is proposed that Action Plans will be discussed.***

The reports from previous AGM are available to **paid-up** Members in the Members Area of the BANZ web-site.

Interest Groups – In addition to the Wood Pellets Interest Group, the two other interest group BANZ plans to establish **Liquid Biofuels and Biogas**) will receive some focus in the months ahead. These Interest Groups are open to all BANZ members and they each have a specific focus of activities on topics of interest. This will allow BANZ to target more closely services to members related to their specific interests. If you are interested in being a member of a specific Interest Group please advise the Executive Officer.

### **Biogas Interest Group**

We hope to launch this Interest Group at the time of the Biogas 2008 Workshop – see details in the events section. This is scheduled for 10<sup>th</sup> July 2008.

### **Liquid Biofuels**

BANZ is proposing to establish a website for those interested in the production of liquid biofuels. Contact from interested liquid biofuel manufacturers or researchers is welcome. A workshop is planned for later in 2008.

## NEW ZEALAND NEWS BRIEFS:

**NBR search for exciting companies: Power flows from farm waste** - Christchurch company Natural Systems has developed an on-farm process to extract methane gas from dairy cow manure to generate electricity in a breakthrough that could save farmers thousands of dollars and clean the environment. The system, BioGenCool, is operating on one of Landcorp's 30 dairy farms with good results and is attracting strong interest from New Zealand farmers and others in Australia and the UK.

Natural Systems technical director Ian Bywater said the large amounts of waste had now become a commercially viable energy source. New Zealand's four million dairy cows dumped a daily 200,000 tonne manure mountain with around 10% dropped on concrete hard stands such as dairy yards and supplemental feeding areas. This waste could yield 80 megawatts of power, Mr Bywater said. A farmer with 850 cows and a feed pad could save up to \$30,000 a year in electricity costs through the BCG system.

Natural Systems topped the environmental technologies sector in The National Business Review's monthly Exciting Companies series with a rating of 69.5 based on surveys by strategic business consultancy New River. An electrical power engineer, Mr Bywater's manure-to-electricity concept won a worldwide Engineering for a Sustainable Future competition organised by the UK Institute for Engineering and Technology in 2003.

The company carried out computer modelling of the system's theoretical effects and conducted an energy report on a North Canterbury farm. State-owned Landcorp senior management supported the programme's economic benefits and environmental value. Mr Bywater said manure scraped from milking yards and increasing numbers of feed pads would be placed in 180,000-litre digesters heated to 35 degrees to liberate bio-gases made up of 65% methane and the rest carbon dioxide. The gas is mixed with 15% diesel as its ignition source to run an engine and drive a generator.

Mr Bywater said the system cost depended on farm size but installation could be up to \$200,000 for the largest properties. Source: National Business Review - 28 March 2008, [Graeme Kennedy](#)

**EECA Tender Round – Supporting the use of wood residue** - EECA's Wood Energy Grant Scheme offers help, by way of funding and information, to those interested in using wood residue as an energy source. There are three key ways that EECA supports this initiative:

1. Providing financial assistance to businesses for demonstration projects
2. Providing financial assistance to businesses for feasibility studies that review the use of wood residue as a fuel
3. Provision of relevant information to sawmills, forestry owners and the general public on the use of wood residues via the Bioenergy Knowledge Centre ([www.bioenergy-gateway.org.nz](http://www.bioenergy-gateway.org.nz)).

#### **Funding available for business grants**

Business grants for capital/demonstration projects may be up to 40% of the capital cost of the project, with a minimum of \$10,000 and maximum of \$200,000.

Funding is available for projects involving technologies that:

- Have the potential for widespread industry adoption
- Have an acceptable payback period or ROI.

Applicants must be willing to have their project monitored by a third party and allow the results to be published to help promote energy efficiency.

#### **Funding available for feasibility studies**

Grants for feasibility studies are available up to a maximum of 75% of the feasibility study costs and the applicant must be willing to have the results of the studies publicised as a case study.

Funding is available for feasibility studies involving technologies that:

- Have the potential for widespread industry adoption
- Are capable of saving energy or have potential for increased use of renewable energy

#### **How do I apply for a business grant or a feasibility study grant?**

Applicants must submit a completed application form and a concise project plan with enough detail to give an overall picture of how the project is expected to run, and its benefits. Go to <http://www.eeca.govt.nz/renewable-energy/bioenergy/documents/wood-energy-grant-application-form-april-08.doc>

**Applications close on 30<sup>th</sup> May 2008.**

## **FEATURE ARTICLE: WOOD PELLETS INTEREST GROUP**

#### **Wood Pellets – what are they?**

Wood pellets are one of the fastest growing residential fuels in New Zealand. Interest from schools and hospitals, the horticultural sector and hotels. Amongst their many advantages, pellets are convenient and easy to use, they have a high heat output and low waste and the fact that they are a renewable resource. A particular advantage for towns and cities across New Zealand that struggle with poor air quality is that the particulate emissions from pellet burners is extremely low. Recent research estimates that in 2006 there were 20,000 pellet fires in New Zealand and 30,000 tonnes or 0.6 PJ of wood pellets consumed annually, mainly in the residential market. Predicted growth in New Zealand is significant with some scenarios putting consumption in the residential market as high as 3.9PJ by 2030. Final figures will of course be determined by a number of factors not least the price of pellets, the availability of feed stock, the magnitude of a carbon charge and the price of other competing fuels.

#### **Key areas of focus**

It is anticipated that the following issues will be prioritised initially in the Wood Pellets Interest Group:

1. Training and accreditation for burner installers
2. Standards and certification of pellets manufacture and burner technologies.
3. Availability of pellets and stove/burner and boilers nationally
4. Market development opportunities including fuel availability and trading.
5. Installation issues – ensuring quality and customer satisfaction.

#### **What does the Interest Group offer?**

Group Members have exclusive access to and participation in the following:

- Training and accreditation programmes.
- Publications on Wood Pellets.
- Representation of their views in submissions to Government.
- The development of industry/sector solutions/
- Comprehensive information services on Wood Pellets.

### Access to Interest Group activities

Access to the Interest Group activities will be limited to BANZ Members however the public promotion of wood pellets will be via the web pages [www.woodpellets.org.nz](http://www.woodpellets.org.nz) or through the Bioenergy Knowledge Centre [www.bioenergy-gateway.org.nz](http://www.bioenergy-gateway.org.nz)

If you would like further information on the Interest Group's activities please contact [Connie.Crookshanks@eastharb.co.nz](mailto:Connie.Crookshanks@eastharb.co.nz) or call 027 472 8038. Information on Membership on BANZ can be found at [www.bioenergy.org.nz](http://www.bioenergy.org.nz)

## FEATURE COUNTRY: - IRELAND

A 2004 report by Sustainable Energy Ireland noted that there was '*currently very little deployment of bioenergy in Ireland.*' The report emerged from the **Bioenergy Strategy Group** which was established by the Department of Communications, Marine and Natural Resources in December 2003 to consider the policy options and support mechanisms available to Government to stimulate increased use of biomass for energy conversion, and to make specific recommendations for action to increase the penetration of bioenergy in Ireland. The report went on to note that the only areas where bioenergy has penetrated to any extent are in '*traditional wood fuel use in homes and in the use of wood residues at sawmills and board plants, mostly for generating heat for use on site.*' The report also noted some exploitation of landfill gas for energy and several anaerobic digestion plants at industrial sites, sewage treatment plants and farms. Key recommendations from the report included:

- "Wood heat in buildings—a major opportunity for market growth ...from houses up to large public and commercial buildings"
- A grant scheme to be put in place to support bioheat systems
- Biomass CHP and AD CHP –significant potential

A new Ministerial Task Force on bio-energy was established in 2006, as part of the ongoing policy to increase the share of indigenous renewable energy in the Irish heat, electricity and transport markets. The Task Force produced a comprehensive '**Bioenergy Action Plan for Ireland**' which set ambitious targets for the deployment of bioenergy, identified priority areas for development and the necessary support measures to encourage supply and demand.

Also in 2006 Ireland's **Energy Policy Green Paper** announced ambitious targets of 30% renewables in electricity consumption by 2020. Ireland is also supporting thermal use of renewables in biomass co-firing, solar thermal and biomass heating, as well as the development of biofuels for the Irish transport market. Substantial progress has been made in peat use with the commissioning of two modern, high-efficiency peat-fired power stations, leading to the closure of all the old stations. The latter will eventually have the possibility to convert partially to biomass co-firing, enabling Ireland to increase fuel diversity in electricity generation.

### National Renewable Targets – Heat

- 5% renewable heat by 2010
  - Bioenergy the key contributor
- 12% renewable heat by 2020
  - Bioenergy the key contributor

### National Policy Targets- electricity

- 15% renewable electricity by 2010
  - Bioenergy a contributor
- 3% renewable electricity by 2020
  - Bioenergy a contributor
- 30% co-firing in peat plants (by 2015)
- 800 MWeCHP with "emphasis on biomass CHP"

**Bioenergy Action Plan for Ireland –2007** - By contrast with the situation as reported in 2004, three years later in 2007, the Report of the Ministerial Taskforce on Bioenergy set out the Bioenergy Action Plan - an integrated strategy for collective delivery of the potential benefits of bioenergy resources across the agriculture, enterprise, transport, environment and energy sectors. It will require sustained multi-agency collaboration, at national, regional and local level, working in strategic alliances to ensure that the potential is realised. It is a key component of the Government's objectives under the Energy Policy Framework 2007 - 2020. The breadth of coverage in terms of departments and targets is extensive and is shown below.

## **Department of Communications, Marine and Natural Resources**

### **Electricity sector**

- Set a 33% target for renewable electricity for 2020;
- Expand the REFIT feed-in-tariff support scheme to facilitate delivery of co-firing in peat stations of 30% by 2015;
- Expand the REFIT feed-in-tariff support scheme to encourage waste to energy projects by supporting hybrid projects.

### **Transport fuel sector**

- Set a biofuel target of 5.75% for road transport fuel for 2010;
- Set a biofuel target of 10% for road transport fuel for 2020;
- Introduce a Biofuel Obligation Scheme by 2009 to ensure delivery of the 2010 and 2020 targets;
- Support research into second generation biofuels including collaborative projects with other countries through SEI and the energy RTDI programmes under the auspices of the Irish Energy Research Council.

### **Heat sector**

- Set a target of 5% renewable share in the heating sector for 2010;
- Set a target of 12% renewable share in the heating sector for 2020 (taking into account the target of 30% co-firing in the Peat Stations by 2015);
- Expand the Greener Homes Scheme to provide support for residential consumers to adopt renewable technologies for heating. This is being delivered through an additional €20m provided in Budget 2007;
- Expand the commercial Bioheat Scheme to include a combination of renewable technologies e.g. solar and wood chip. This is being delivered through an additional €4m provided in Budget 2007;
- Expand the eligibility of the commercial Bioheat Scheme to include the voluntary and community sectors.

### **Research and development**

- Through the Energy RTDI Strategy under the auspices of the Research Council as well as SEI's R&D programmes to increase support for research projects across the bioenergy sector;
- Through the Charles Parsons Awards programme build increased research capacity across the bioenergy sector.

## **Department of Agriculture and Food**

- Introduce an additional €6m energy crop 'top up' payment of €80 per hectare on top of the existing EU Energy Crops Premium of €45 per hectare payment;
- Introduce an €8m Bioenergy Scheme to provide establishment grants to encourage farmers to plant new energy crops such as miscanthus and willow;
- Introduce a €1.2m dedicated Wood Biomass harvesting machinery grant programme for wood chippers and forest residue bundlers;
- Encourage a rate of afforestation that is suitable for and sufficient to meet increased market demand for wood in the medium to long term;
- Introduce a FEPS scheme to facilitate increased levels of afforestation;
- Develop and support the forest wood energy chain to deliver quality wood fuel at a competitive price;
- Fund research in collaboration with DCMNR & SEI to identify and select plant varieties and crop production and management systems that are most suited to biofuel production in the Irish context.

## **Department of Environment, Heritage and Local Government**

- Amend planning guidelines to facilitate development of micro renewable technologies at domestic level;
- Initiate research into the extension of exempted development provisions for micro-renewables at industrial and retail/commercial sites;
- Examine the rebalancing of annual motor tax to incentivise the motoring public to drive cleaner cars and to impose penalties for cars with higher CO<sub>2</sub> emission levels. A public consultation has been launched on this issue;
- Provide for the energy labelling of vehicles to empower consumer decision making;
- Promote the use of biofuels at up to 5% blends in Local Authority fleets and when purchasing new fossil fuel vehicles ensure that they are capable of taking much higher biofuel blends, in the range of 30% and higher;
- Review within 12 months the Part L Building Regulations to incentivise the use of renewable technologies for heating in buildings and significantly raise the energy efficiency requirements in new buildings by at least 40%;
- Require all street lighting and traffic lighting systems to be energy efficient.

## Department of Finance

- Five year excise relief scheme introduced in Budget 2006 at a cost of over €200m.
- Renewing the Business Expansion Scheme with effect from 1 January 2007 for a seven year period to 31 December 2013. The BES company limit is being increased from its current level of €1 million to €2 million, subject to a maximum of €1.5 million to be raised in a twelve month period. The annual investor limit is also being increased from its current level of €31,750 to €150,000;
- Renewing the Seed Capital Scheme from 1 January 2007 for a seven year period to 31 December 2013.
- The SCS permits employees who leave employment to invest in certain new businesses and take up a job in the relevant business to claim a refund of tax for up to the previous six years. The investor limit is being increased to €100,000 per year;
- The 50% VRT relief for Hybrid Vehicles has been extended to flexible fuel vehicles in Budget 2006 and to electric cars in Budget 2007;
- Launch a public consultation on the revision of the current VRT system to take greater account of environmental issues, in particular CO<sub>2</sub> emissions;

## Office of Public Works

- Develop the new building programme to include bioenergy heating systems. Bioenergy heating systems will become the standard norm in new OPW buildings;
- Convert within 12 months, 20 of the State's large existing buildings to bioenergy heating systems;
- Increase the use of passive design measures to ensure all new buildings are more energy efficient;
- Establish an initial target of 10% energy savings in 20 of the OPW's largest buildings, through the piloting a new web-based energy monitoring system, and expand this programme to a further 230 buildings on completion of the pilot programme;
- Use biomass combined heat and power (CHP) technologies in future major site developments;
- Give more favourable consideration to buildings which use bioenergy and other renewable technologies when considering new buildings for lease;
- Require the public sector to lead the way on energy efficiency with a mandatory programme of efficiency measures including the sole use of energy efficient lighting in offices, hospitals and other public buildings.

## Department of Transport

- CIE transport companies to ensure that all of their new fossil fleet purchases are capable of using biofuels at blends of at least 30% by including the requirement for such technical capability to be specified in procurement tenders;
- CIE transport companies mandated to move as soon as possible towards a 5% blend in all their existing diesel fleet;
- Publication of a Sustainable Transport Action Plan before the end of 2007 which will identify further measures that will help a switch to biofuels and more energy efficient forms of fuel for transport.

## Department of Education and Science

- Expand existing programme of biomass heating in schools, starting with 8 additional schools in Summer 2007 with a view to broadening this on a significantly wider scale on a national basis;
- The Department has already developed a number of generic school designs with SEI which minimize energy use and costs in new schools. This design will be implemented in 40 new schools which will be capable of being 2.3 times more efficient in energy terms than best international normal standards.

## All Departments and Agencies

- Develop a fully coordinated cross-agency information and education programme to provide high quality bioenergy technology information to the public to raise awareness and acceptance of bioenergy technologies;
- SEI and Enterprise Ireland will together develop a set of industry and product standards in the biomass area to ensure high efficiency standards in the developing pellet and woodchip markets;
- SEI and FÁS to ensure that renewable energy installer training is mainstreamed into building industry training programmes;
- Work together through the High Level Working Group to ensure delivery of individual and joint Departmental and Agency responsibilities as well as offering a forum to engage with relevant stakeholders to keep track of progress;
- Coordinate through the High Level Working Group, working in conjunction with the Irish Energy Research Council, the funding priorities for the research, development and deployment of innovative projects in the bioenergy sectors;
- Develop, working with Northern Ireland, an all-island approach to developing the bioenergy sector over the next three years.

The Action Plan is accessible here: [www.dcmnr.gov.ie/NR/rdonlyres/6D4AF07E-874D-4DB5-A2C5-63E10F9753EB/27345/BioenergyActionPlan.pdf](http://www.dcmnr.gov.ie/NR/rdonlyres/6D4AF07E-874D-4DB5-A2C5-63E10F9753EB/27345/BioenergyActionPlan.pdf)

## Key organizations in Bioenergy in Ireland

Who	Where	What
Sustainable Energy Ireland (SEI)	<a href="http://www.sei.ie/index.asp?locID=2&amp;docID=-1">http://www.sei.ie/index.asp?locID=2&amp;docID=-1</a>  <a href="http://www.sei.ie/index.asp">http://www.sei.ie/index.asp</a>	<p><b>Sustainable Energy Ireland (SEI), formerly the Irish Energy Centre was set up by the government in 2002 as Ireland's national energy agency. Our mission is to promote and assist the development of sustainable energy.</b></p> <p>Sustainable Energy Ireland manages programmes aimed at:</p> <ul style="list-style-type: none"> <li>▪ assisting deployment of superior energy technologies in each sector as required;</li> <li>▪ raising awareness and providing information, advice and publicity on best practice;</li> <li>▪ stimulating research, development and demonstration (RD&amp;D);</li> <li>▪ stimulating preparation of necessary standards and codes;</li> <li>▪ publishing statistics and projections on sustainable energy and achievement of targets.</li> </ul>
Irish Bioenergy Association (IrBEA)	<a href="http://www.irbea.org/index.php?option=com_content&amp;task=section&amp;id=4&amp;Itemid=26">http://www.irbea.org/index.php?option=com_content&amp;task=section&amp;id=4&amp;Itemid=26</a>	<p>The Irish Bioenergy Association (IrBEA) was founded in May 1999. It has been formed to promote the bioenergy industry and to develop this important sector in the Republic of Ireland and Northern Ireland.</p>

**Pellets producers in Ireland – the manufacturing market in Ireland is currently a two-horse race. The articles below give some background to the two key players with the links providing some additional information about the market in Ireland and Europe more generally.**

**First in the market was Balcas Ltd.** Based in Enniskillen (in Northern Ireland) Balcas operates the largest wood pellet mill in the British Isles. In 2000, the Company invested £15 million into its Enniskillen headquarters site and became the largest state-of-the-art plant in the British Isles. The EBalcas wood pellets or 'brites' are a locally available fuel. Balcas *brites* can be used in commercial applications as well as in the home (<http://www.brites.eu/>). Interestingly householders can benefit from either UK or Ireland based grants aimed at encouraging uptake (<http://www.brites.eu/Grants.aspx>)

**The new players are 'Irish Pellets'.** *Irish Pellets* is a new Irish company serving the home energy market and providing an Irish produced home heating fuel that is 100% 'green.' This interesting article from the on-line publication 'Irish Entrepreneur' outlines how a new company focussing on producing pellets from Irish sourced materials has been a great success. Currently wood pellets are imported into Ireland from sources as diverse as Canada to Russia. Much of the imported product is also 'Grade 2' or lower in quality and is completely unsuitable for most domestic burners. Irish Pellets produce a 'Grade 1' guaranteed Irish product from this year and will supply homes all over the country with the hugely efficient Irish Pellets wood pellets. More details at: [http://www.irishentrepreneur.com/crux/irish\\_pellets.asp](http://www.irishentrepreneur.com/crux/irish_pellets.asp) further information about this company (and the wider market) are also presented in the Irish publication 'Irish Timber & Forestry' - [http://www.irishforests.com/index.php/index.php?option=com\\_content&task=view&id=56&Itemid=63](http://www.irishforests.com/index.php/index.php?option=com_content&task=view&id=56&Itemid=63)

## INTERNATIONAL NEWS:

- Biggest biomass Plant in Scotland
- Bioheat Gaining Support in the Northeast United States
- UK Biofuels Industry lacked Government support – survey outcome
- US - Plans for world's largest landfill gas to LNG facility
- The UK Renewable Transport Fuel Obligation (RTFO) comes into effect
- Biofuel demand 'will increase GHGs'
- Wood Waste Power Plant Proposed for Western Australia
- US DOE Announces US \$7 Million for Biomass
- Canadian bioenergy grants continue to build a greener energy industry
- Applications to UK £4m bio-energy grant fund
- UK Report - Waste wood – the untapped resource for Biomass Fuel

**Biggest biomass Plant in Scotland** - Built on time and on budget, Steven's Croft is the biggest biomass plant in Scotland and will generate enough electricity to power the equivalent of 70,000 homes every year. The £90m scheme, which was recently opened by First Minister for Scotland Alex Salmond, will now make an important contribution to the UK effort to tackle climate change by displacing up to 140,000 tonnes of greenhouse gases every year.

Steven's Croft will also see a further significant investment in local and regional economy. It's creating 40 direct jobs and will help to maintain up to 300 indirect jobs in the local forestry industry. Local farming will also benefit from the long term, low risk energy crop initiative being developed by E.ON.

The plant will require over 480,000 tonnes of fuel every year. The fuel is a blend of:

- 60% sawmill co-products and small round wood
- 20% short rotation coppice (willow)
- 20% recycled fibre (from wood product manufacture)

To begin, the power station will use a mixture of biomass fuels derived from forestry co-products such as sawdust from local saw mills. Within four years of operation, it's expected that around 90,000 tonnes a year will come from willow harvested by local farmers. To ensure smooth running of the supply and generation sides of the station, it is made up of two adjacent sites, with one dedicated to fuel processing and the other being the actual generation plant.

**Bioheat Gaining Support in the Northeast United States** - With heating season coming to a close in the Northeast, businesses, homeowners and other utility customers are looking back at their heating bills and thinking about how they might bring them down next year. While conservation is an option for some, many people aren't willing to sacrifice comfort to save money. Bioheat systems may provide some relief.

"In terms of bioheating, things are really expanding. There's more stoves and furnaces being sold and more schools are being powered with pellets and wood chips," Andrew Perchlik of Renewable Energy Vermont said. "We're definitely getting more requests from consumers. There's more fuel dealers carrying [bioheating products] and the state is requiring it for all new bids for projects that will be funded entirely with state money."

Much of the growth in Vermont has been in pellet and other biomass markets. Currently, 30 Vermont schools are heated or powered with pellet and wood chip boilers. Renewable Energy Vermont is also looking into other feedstocks including soy beans, sunflowers, algae and hemp, but Perchlik says those sources are still in the very early stages of development. More details at: <http://www.renewableenergyworld.com/rea/news/story?id=52272>

**UK Biofuels Industry lacked Government support – survey outcome** – The results of the biofuels survey recently conducted by Biofuels Media show that there is a real unease in the UK market that we will fall behind our EU competitors without more Government support. Of 16,000 people surveyed through an online questionnaire an overwhelming 83% of respondents felt that the UK Biofuels Industry lacked Government support. The opportunity of a 1.2 billion litre per year industry will be fulfilled by EU and US competitors unless there is tangible Government support for the UK industry, and subsidised imports are stopped. More details at [http://www.biofuelsmedia.com/news\\_link.php?new=94](http://www.biofuelsmedia.com/news_link.php?new=94)

**US - Plans for world's largest landfill gas to LNG facility** -- US-based waste management service provider Waste Management has joined with gas and engineering company Linde North America to create what it claims will be the world's largest facility to convert landfill gas into clean vehicle fuel. The US \$15.5 million (\$16.6 million) project will involve building a liquefied natural gas (LNG) facility at the Altamont Landfill near Livermore in California. Gas converted into fuel at the site will power Waste Management's fleet of garbage and recycling trucks in California. When the facility begins operating in 2009 it is expected to produce up to 13,000 gallons (49,210 L) a day of LNG.

**The UK Renewable Transport Fuel Obligation (RTFO) came into effect on Tuesday 15 April** - dubbed Biofuels Day or 'Biofuels Day' - The UK government claims that the RTFO will make "it easier for motorists to use greener fuel [and] help save millions of tonnes of carbon dioxide in the coming years." The UK's transport Minister noted that "we must do all we can to ensure biofuels are produced sustainably. We know people are concerned about the environmental risks associated with expanding biofuel production and we take those concerns very seriously". He went on to add "That is why we want to introduce mandatory standards as soon as possible to guarantee that biofuels don't cause deforestation or food shortages and we are leading international work to do this. In the meantime, we require suppliers to produce sustainability reports, providing an immediate incentive for them to source biofuels responsibly." More details at: [http://www.biofuelsmedia.com/news\\_link.php?new=93](http://www.biofuelsmedia.com/news_link.php?new=93) see also [http://www.independent.co.uk/environment/climate-change/biofuel-the-burning-question-808959.html?CMP=KNC-google\\_environment&HBX\\_OU=50&HBX\\_PK=biofuel%20news](http://www.independent.co.uk/environment/climate-change/biofuel-the-burning-question-808959.html?CMP=KNC-google_environment&HBX_OU=50&HBX_PK=biofuel%20news)

**Biofuel demand 'will increase GHGs'** – Growing demand for biofuels could actually increase greenhouse gas emissions as farmers clear forests and grassland to create more cropland, according to a new US study. A team of researchers from Princeton University concluded land use change reduces the benefits of biofuels because it would release carbon sequestered by the land into the atmosphere. More details at: [http://www.edie.net/news/news\\_story.asp?id=14373&channel=0](http://www.edie.net/news/news_story.asp?id=14373&channel=0)

**Wood Waste Power Plant Proposed for WA** - Babcock & Brown and National Power are proposing a 40MW power station in Western Australia that would be fuelled by plantation forestry waste. The plant proposed for Manjimup in south west Western Australia would consume about 380,000 tonnes per year of plantation waste and would deliver net CO<sub>2</sub>e savings of 261,279 tonnes per year, if the offsetting of additional conventional generation is taken into account. Connell Wagner have released a public environmental review on behalf of the joint venture. More details at: <http://www.connellwagner.com.au/cwagner/uploads/documents/PER.pdf>

**DOE Announces US \$7 Million for Biomass** - The U.S. Department of Energy (DOE) announced the issuance of a Funding Opportunity Announcement (FOA) for up to US \$7 million in federal funding over two years (FY 2008 - 2009) for advanced research and development in converting non-food based biomass to advanced biofuels. Combined with private minimum cost share of 20 percent, more than US \$8.75 million would be invested in this research effort. More details at: <http://www.renewableenergyworld.com/rea/news/story?id=52278&src=rss>

**Canadian bioenergy grants continue to build a greener energy industry** - To encourage the further expansion of Alberta's renewable energy sector, the Government of Alberta has invested more than \$17 million in grants to bioenergy projects located throughout the province. Fifteen companies will receive the grants—ranging from \$18,500 to \$5 million—to help fund new facilities and research to strengthen the bioenergy industry. More details at: <http://alberta.ca/ACN/200804/232571A58E0D6-92A1-2248-D767535A64CFDFBF.html>

**Applications to £4m bio-energy grant fund** - A £4 million fund to support the installation of biomass-fuelled heating and combined heat & power projects, including anaerobic digesters, was opened to applications in early April by the UK's Climate Change Minister, Phil Woolas. Applications are welcome from industrial, commercial and community sectors. This encompasses public and private limited companies, from smaller businesses like pubs, clubs, shops or farms, to offices, golf courses, recycling centres, supermarkets and stately homes, right up to larger businesses like breweries, food processing companies and airports. Applicants from the community sector can include schools, colleges, universities, hospitals, local authorities, housing associations and charities. Phil Woolas, said: *"We have to take serious steps to tackle climate change by reducing our carbon footprint. As almost half of our CO<sub>2</sub> emissions are the result of heating buildings or water or for industrial processes, switching our dependence on fossil fuels to more energy efficient equipment makes sense. Funding to support the installation of biomass-fuelled heat boilers and combined heat and power plants can really make a difference and I invite all those who are eligible to apply."*

**UK Report - Waste wood – the untapped resource for Biomass Fuel** - The huge potential of reusing waste wood as fuel is being wasted, Environment Minister Joan Ruddock has warned. The significant carbon and energy benefits of recovering energy from waste wood are detailed in a new information report on the sector that surveys the activities of producers, aggregators and users of waste wood. Recycling and energy markets for clean, virgin wood have been growing in recent years; however waste wood has been a largely overlooked resource. Currently up to 10 million tonnes of waste wood is being produced in the UK each year, most of which goes to landfill. Joan Ruddock, Minister for Climate Change and Waste, said: *"It has been estimated that recovering energy from 2 million tonnes of waste wood could generate 2600GWh electricity and save 1.15 million tonnes of carbon dioxide equivalent emissions, with greater benefits available by recovering heat as well as power. This is a huge potential resource that is being wasted."*

With the majority of waste wood arisings being contaminated, the key to realising this potential is more, geographically dispersed, Waste Incineration Directive compliant combustion facilities delivering both energy and heat recovery. The publication of the Waste Wood Information Report fits well with the intended convergence of energy and waste policy by creating greater awareness of this substantial, indigenous and largely untapped biomass resource available in municipal, construction and demolition and commercial and industrial waste streams. This coincides with the banding of the Renewables Obligation which will significantly increase support for electricity generated from biomass and combined heat and power (CHP). More details at: <http://www.defra.gov.uk/news/2008/080409b.htm>  
<http://www.defra.gov.uk/environment/waste/topics/pdf/wastewood-biomass.pdf>

## EVENTS CALENDAR:

### New Zealand Events:

**New Zealand Society for Sustainability Engineering and Science – 'liquid biofuels' – Auckland**  
**Friday, 9 May 2008 , 9am – 12 noon.** [www.nzsses.auckland.ac.nz](http://www.nzsses.auckland.ac.nz)

**NZIF Conference 2008 – ‘Forestry and Agriculture – Collaborating for Sustainability’ – 15–18 May 2008 more details at <http://www.nzif.org.nz/conference2008/>**

### **BANZ 2008 Events - CURRENT**

- **NZ Biogas 2008 – 10 July 2008**, Waikato University Campus, Hamilton – further details to come (see BANZ web-site for Programme Details)

### **BANZ 2008 Events – COMING SOON**

- Use of pellets in commercial / institutional applications – further details to come
- Liquid Biofuel Production
- Conversion of hospital boilers from coal to biomass – further details to come

### **International Events:**

**World Bioenergy Conference and Exhibition**, 27 – 29 May 2008, Sweden. Details at <http://www.elmia.se/worldbioenergy/>

**APEC Biofuels Summit**, 1 – 3 June 2008, China, <http://www.cfeci.com/abs2008/>

**International Trade Fair for the Production and Processing of Oils and Fats made from Renewable Resources**, 18–20 November 2008. Details at <http://www.oils-and-fats.com/link/en/16331430>

### **Recent International Bioenergy Reports of General Interest:**

#### **Renewable Heat – BERR’s Call for Evidence**

Submissions closed recently on a UK Consultation on heat energy. On 31st January 2008 BERR (Department of Business, Enterprise and Regulatory Reform) along with Defra and the Department of Communities and Local Government (CLG) published the Heat Call for Evidence.

The Call for Evidence was seen an important next step in developing the strategy for heat. The document sets out the current understanding of the opportunities and prospects for renewable heat and some of the barriers that prevent the greater use of renewable heat. It asks for views about the technologies available to the UK - which offer the most efficient and practical contribution to achieving the Country’s aim and in which specific scenarios? It seeks views on whether the UK needs new incentives to stimulate the development of renewable heat; what form they might take; and which options provide the most cost-effective solutions.

Changing the way in which the UK thinks about and uses heat is noted as difficult and must be achieved cost-effectively. To move the discussions forward *technical contributions and firm evidence is needed on how barriers to promote renewable heat including biogas (can be overcome)*, what role should low-carbon electricity play in heating and how surplus heat can be captured, transported and used, especially as the UK has a well established gas network.

A link to the Consultation paper can be found on the following web-page – <http://www.berr.gov.uk/consultations/page45353.html>



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