

# Showcasing wood fuelled heat plant in Christchurch

...a showcase of innovative larger scale wood fuelled heat plant and wood fuel supply in Christchurch









# Who's Who at the event

29 September 2015 Travelling workshop, Christchurch

## **Workshop Administration**

This workshop is being managed and administered by the Bioenergy Association. Please contact <u>admin@bioenergy.org.nz</u> for any corrections to this Who's Who booklet.

# **Workshop Proceedings**

A complete set of conference documents (including an updated version of the Who's Who will be posted on open access on the Bioenergy Association website for a brief time after the event before being moved to the Members Only area.

# Join the Wood Energy Interest Group (WEIG)

The Bioenergy Association has three special topic Interest Groups to help focus the interests and activities of its various Members. The Interest Groups are the powerhouse of the organisation with responsibility for policy and management of activities to the Interest Group topic. The Interests Groups are open to any Bioenergy Association member and are structured around a Committee who lead on any aspect of the topic.

If you want to be active in the Wood Energy Interest Group (WEIG) you should join the association.

Contact us to find out how.

Brian Cox
 (Executive Officer)

brian.cox@bioenergy.org.nz

## **Continuing Professional Development (CPD)**

The Bioenergy Association supports members by providing opportunities such as this workshop that contribute towards Continuing Professional Development credits and maintaining registration as a wood energy adviser. Contact the Executive Officer for more details <u>executive@bioenergy.org.nz</u>

Contact Us				
•	Brian Cox (Executive Officer)	brian.cox@bioenergy.org.nz	Ph: +64-274 771048	
•	Anne Phiri (Administration)	admin@bioenergy.org.nz	Ph: +64 4 385 3398	



# Showcasing wood fuelled heat plant in Christchurch

# 29<sup>th</sup> September 2015

A showcase of innovative larger scale wood fuelled heat plant and wood fuel supply in Christchurch.

Christchurch now has a reliable wood fuel supply with four accredited wood fuel suppliers and a range of heat plant applications.

This event is for those interested in understanding modern wood fueled heat plant and investing in wood energy facilities in Canterbury and elsewhere. It will provide an opportunity to see the heat plant in action and to hear from the owners, operators and equipment suppliers.

This is a hands-on event where you see and touch the plant.

This is a travelling workshop. The site visits will be wrapped in travelling presentations and discussions. As we travel speakers will provide information on each site we are to visit and on the specific technology and aspects of the application. These small groups will assist discussion between attendees and your ability to question speakers. (If more than one bus is required then speakers will be swapped between buses).

The focus of this event will be to:

- Demonstrate five modern heat plant facilities
- Update attendees on the technologies being used
- Hear from owners why they chose wood energy
- Provide the latest information for heat plant owners on the Bioenergy Association's Wood Energy Quality Programme.
- Provide opportunities for heat plant owners, investors, wood fuel suppliers and equipment suppliers to share ideas.

A specific focus of the workshop will be the wood fuel supply at each facility. Owners and fuel suppliers will discuss the importance of having a reliable and consistent supply of contracted specification fuel.

The travelling workshop will be followed (on 6<sup>th</sup> and 7<sup>th</sup> Oct) by two short courses on "*contracting* for the sale and purchase of wood fuel", and "safe operation of small scale heat plant". Information on these courses are available at <u>http://www.bioenergy.org.nz/events</u>.

# **Travelling Workshop Programme**

	29 Sept	ember 2015			
9.00	Pick up at Christchurch airport dom	estic bus bay			
9.05 – 9.25	Travel to Belfast				
	Introduction to Zealandia heat plant	t <b>facility –</b> Manager, Zealandia			
	Visit Zealandia heat plant facility				
10.00 - 10.25	Tea Break Sponsored b	y Polytechnik Biomass Energy	POLYTECHNYK Biomass Energy		
	Travel to Burwood				
10.25 - 10.35	Introduction to Burwood Hospital h	<b>eating facility</b> - Christian Jirkowsky, Po	lytechnik Biomass Energy		
10.35 -10.45.	Quality wood fuel supply - Sam Lees	, Canterbury Woodchip Supplies			
	Visit Burwood Hospital he	ating facility (under constructi	on)		
11.15 - 11.30	Travel to Bromley				
	Introduction to Pioneer Generation Generation	and Burwood heat plant facility – Alis	ster Fisher, Pioneer		
11.30 -11.40.	Introduction to Wood Energy New Z	ealand (WENZ) - Richard Ireland, WEN	ΝΖ		
Visit Bromley Energy Centre					
the second se					
12.00 - 12.40	Lunch Sponsored k	by Pioneer Generation	<b>PIONEER</b> GENERATION		
12.00 - 12.40 12.40 - 12.50.		<b>by Pioneer Generation</b> t <b>y Plan –</b> Brian Anderson, Bryn Martin	<b>PIQNEER</b> GENERATION		
12.40 - 12.50.			PIQNEER GENERATION		
	Update on the Canterbury Air Qualit Travel to Hillmorton Hospital				
12.40 – 12.50.	Update on the Canterbury Air Quali Travel to Hillmorton Hospital Introduction to Hillmorton Hospital	<b>ty Plan –</b> Brian Anderson, Bryn Martin	g Energy		
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### The workshop is supported by









Wenz Wood Energy New Zealand



Peter Kernohan Solutions Ltd



Linking customers with real solutions













As the workshop will be visiting industrial sites all attendees must wear strong footwear and bring hard hats and hi-vis vests.

**Continuing Professional Development:** The Bioenergy Association supports members by providing opportunities such as this workshop that contribute towards Continuing Professional Development credits and maintaining registration as a wood energy adviser.

Contact the Executive Officer for more details at <a href="mailto:executive@bioenergy.org.nz">executive@bioenergy.org.nz</a>

# List of Attendees

Organisation	Name
Auckland Council	Lauren Simpson
Azwood	Brook Brewerton
Azwood	Ethan Heliwell
Bioenergy Association	Brian Cox
Bryn Martin	Brian Anderson
Canterbury District Health Board	Tim Emson
Canterbury District Health Board	Terry Walker
Canterbury District Health Board	Dominic van Berlo
Canterbury Landscape Supplies	Mike Burn
Canterbury Woodchip Supplies	Brad Coleman
Canterbury Woodchip Supplies	Sam Lees
Danone	Nicolas Cogan
EECA	Peter van Meer
Fonterra	Alan Maitland
Enercon	Jo Chuan
K&L Industries	Ian Kempthorne
Lincoln University Property Services	Rod Vardy
Lincoln University Property Services	Barry Fairbrass
Lincoln University Property Services	Chris Stevens
Lyttelton Engineering	Peter Judd
Lyttelton Engineering	Michael Smith
Natures Flame	Gerard Dobbs
Peter Kernohan Solutions	Peter Kernohan
Pioneer Generation Ltd - WENZ	Richard Ireland
Pioneer Generation Ltd	Alister Fisher
Polytechnik Biomass Energy	Christian Jirkowskey
RCR Energy Systems	James Malthus
Red Stag Timber	Mark Lovegrove
Taylors Manufacturing (Taymac)	Julian Dunn
Wood Energy Australia Pty Ltd (and Living Energy Ltd)	Rob Mallinson
Zealandia Horticulture Ltd and Biomass grower (Europe)	Jacob Kamminga

## View speaker and attendee profiles and interests overleaf.

## Profiles

#### **Speakers**

#### Jacob Kamminga

#### Nursery Manager at Zealandia Horticulture Ltd

And Biomass grower (in Europe)



Jacob always had a drive for renewable energy.

In 1985 Jacob got a 50% financial grant from the Dutch government to build a 36m high 75kW windmill at his parents horticultural farm, however the final building consent never came through as it would be one of the first windmills to be built in The Netherlands and the Not In My Backyard Syndrome was too strong for the local government.

In 1991 Jacob started planting a Willow mother-stock plantation in Poland with 6 different clones. In 1994 25ha medium wet wetlands were planted with Willow. Because of limited rain (no irrigation) and no more medium wet wetland available within the farm, Jacob planted trails with Miscanthus sinensis giganteus, Sida hermaphrodita, Fallopia sachalinensis and Populus on 3,500m2 sandy soils.

In 2007 Jacob installed a 1MWheat Danstoker warm water biomass boiler next to 4 gas/oil boilers (19MWheat) to heat 6ha of glasshouses in Poland, to be fueled with willow chip and forest woodchip, 45% water content (Wet Based).

May 2013 Jacob started working for Zealandia Horticulture as a Nursery manager and was closely involved with the new build of 2 Polytechik bio-mass warm water boilers to replace the old Vekos boiler and is now the operator of the new woodchip boilers.

Email: <u>Jacob.K@Zealandia.co.nz</u> | Website: <u>www.zealandia.co.nz/Home.aspx</u>

# Brad Coleman and Sam Lees

Canterbury Woodchip Supplies

Canterbury Woodchip Supplies Limited

Brad established the business in 2011 with the simple expectation of providing an added value service to his agricultural contracting business. Further investigation in 2012 into the bioenergy sector revealed a niche to provide customised woodchip. Three

Government contracts, extensive large scale precision plant and a can do reputation means Brad is now one of the leading contributors to this burgeoning sector.

Recognising the market potential Brad employed Sam Lees, a former banker and marketing manager to facilitate business growth. Sam's role is mainly focussed on ensuring existing clients needs are being met and also exploring new opportunities for businesses to convert from non-renewable to renewable energy sources.

Together, Brad and Sam present a strong team committed to honest upfront advice and genuine solutions.

sam.l@canterburywoodchip.co.nz | brad@colemanag.co.nz

# Christian Jirkowsky

#### General Manager Polytechnik Biomass Energy Ltd



Christian Jirkowsky, based in the Hawkes Bay New Zealand, is Polytechnik Biomass Energy's General Manager with twentyfive years of experience in areas such as heat and power generation via wood, biomass and fossil fuels, emission control and heat recovery systems in markets such as Europe, Asia, Oceania and Americas. He holds a degree in mechanical engineering and is passionate about sustainable and renewable energy solutions.

Christian is experienced in design and engineering of wood and biomass fuelled thermal energy plants as well as emission control system with a focus on leading-edge technologies.

Not only due to his direct involvement in over 600 bioenergy plants he is recognised as one of the leading experts in the Bioenergy Industry in Australasia with particular expertise in: Industrial Energy Plants, Combined Heat and Power (Co- and Trigeneration), Combustion Solutions, Energy Recovery Systems, Energy from Wood and Forest Waste, Air Pollution Control, etc.

With it's 250 employees, Polytechnik engineers, supplies and installs wood/biomass-fuelled boilers with a thermal output ranging from 300kW to 30,000 kW (single unit output).

With 50 years of experience in engineering, manufacturing, installing and commissioning of about 3,000 biomass fired heat and power plants Polytechnik has become experts in generating energy from renewable biomass. Polytechnik is committed to excellence. This is reflected in their ISO certifications for our Quality (ISO 9001), Health and Safety (OHSAS 18001) and Environmental (ISO 14001) Management Systems.

Since 2013, including the 2014 EECA Supreme Award winning plant, K&L Nurseries, Polytechnik sold and/or installed, in both New Zealand and Australia, ten state-of-the art boiler plants the last two years with a total thermal output of over 20,000 kW.

For more information please visit <a href="http://www.polytechnik.co.nz/">www.polytechnik.co.nz/</a>

Contact: office@polytechnik.co.nz, DDI: 06 211 3496, M: 021 477 202

#### **Richard Ireland**

Contracts and Performance Manager Pioneer Generation Limited / Wood Energy New Zealand



Richard comes from a contracting background; working in the civil construction Industry across New Zealand, Australia and Britain. Since back in New Zealand he has been working in the energy industry looking after, constructing and refurbishing hydro and wind power assets. Of later stages Richard started working on thermal energy assets (installation and operation), before taking the opportunity to manage the Wood Energy New Zealand (WENZ) Business.

Richard has a cross functional role as the contract and performance manager of Pioneer Generation Ltd, working with the contracting and wood energy divisions to maximise, deliver and expand

Pioneers business interests.

Pioneer Generation generates over 220GWh of electricity annually from 15 sites, including hydro, wind and landfill gas and contract asset maintenance for other electricity consumers and more..... Our award winning specialist industrial heat and energy supply division, Energy for Industry (EFI) provides globally competitive sustainable energy solutions. EFI owns and/or operates 7 sites across New Zealand supplying process heat in the form of steam and hot water partnering with a mix of some New Zealand's leading exporters, hospitals, councils and tertiary institutions.

richard.ireland@pgl.co.nz

www.pioneergen.co.nz

#### Tim Emson

#### **Canterbury District Health Board**



Tim Emson is the CDHB Energy Manager overseeing an annual energy spend of \$7 million on electricity, coal, LPG and wood. He has 30 years' experience in Maintenance & Engineering including working for 3 boiler manufacturers.

Tim carried out the initial feasibility study for the Hillmorton woodchip boiler and was involved with the Burwood biomass boiler project.

Procurement of fuel contracts is part of Tim's role including fuel for the CDHB boilers you will see on the site visits.

tim.emson@cdhb.health.nz

www.cdhb.health.nz/Pages/default.aspx

#### Terry Walker

#### **Canterbury District Health Board**

Terry has been with the CDHB for 7 years, initially as a Project Manager and now in charge of the operational maintenance at all CDHB and WCDHB sites.

He managed the installation of the 7.5MW dual fuel boilers at Christchurch hospital in 2010 and the first DHB wood chip boiler at Hillmorton in 2012.

He has represented the CDHB in the selection and procurement process for the new biomass boilers currently being installed at Burwood and is passionate about sustainability in general.

Terry.Walker@cdhb.health.nz

#### Ian Kempthorne K&L Industries



Married to Michelle. We have four kids, Ethan 13 Isabella 11 Logan 9 Rohan 6

I was born and raised in Southland and in 1988 started my apprenticeship as a Heavy Equipment Diesel mechanic. I finished with A grade cert and went travelling and working in gold mines in Australia in 1992.

I also travelled to Canada, Europe and UK and arrived back in NZ in 1995.

After a couple of years in road truck workshop I met Michelle and took her to Kalgoorlie West Australia and worked in gold mines. Michelle was hairdressing in the town. We came back to NZ for

2000 and got married in May of that year.

I worked as a mechanic for the next 6 years ending up as leading hand at Goughs Cat in Christchurch workshop.

All this time I was helping at the nursery doing the engineering and maintenance after work or on weekends.

In 2006 I decided to stop the mechanics and become a flower grower!

My first project was to clear land and help with construction of current rose house and weld the 6km of heating pipes. We installed an old coal boiler ex Dunedin wool scours and had roses in by Christmas 2007.

We now have 8000sqm of glasshouses and Gerbera and Roses are our crop we grow with Michelle's parents also in the business.

2013 we installed a new biomass boiler and heat storage and have just won 3 awards in the Balance Farm Environmental awards for Canterbury.

We also won 2 EECA awards and taking out the supreme award which we are very proud of.

Our focus is on local domestic market and we supply cut flowers to florists and wholesalers and auction houses.

loadedthorn@farmside.co.nz

#### **Brook Brewerton**

#### Azwood



Azwood Limited is heavily involved in the wood fuel industry supplying a range of wood fuels grades to match the boiler and heat requirements you have. A manufacturer of premium wood pellets for industrial

and domestic use as well as wood chip and biomass fuel.

Brook heads up the Sales team at Azwood as well as being heavily involved in the research and development of wood energy. Be free to contact Brook who would appreciate any opportunity to discuss your requirements no matter what location you are. <a href="http://www.azwood.co.nz">www.azwood.co.nz</a>

#### Brian Anderson Managing Director

Bryn Martin



Brian has 37 years' experience as a mechanical engineer in New Zealand, the UK, and Asia. His focus has been (and still is) energy efficiency in all its guises with considerable time spent in plant and facility operations, large boiler, co-generation plant, and asset management systems. He has occupied a number of positions in design, construction, technical operations, service delivery, and senior management.

Returning to New Zealand 9 years ago he applied his experience to design consultancy, frequently in the area of wood energy, groundwater heat pumps, and other energy efficient initiatives.

In 2014 he chose to start his own Christchurch based M&E consultancy, Bryn Martin Ltd.

b.anderson@brynmartin.com

Gerard Dobbs Account Manager Natures Flame

gerard.dobbs@naturesflame.co.nz www.naturesflame.co.nz/





#### **Rob Mallinson**

Managing Director Wood Energy Australia Pty Ltd (and Living Energy Ltd)



In 2000, whilst a General Manager in Carter Holt Harvey's Forest division, Rob identified the opportunity to supply the substantial volumes of wood residues generated across CHH's various operations to large heat users, for use as a source of thermal energy, and so set up a stand-alone business unit of CHH (CHH Biogrid) to promote the use of woody biomass as an energy source to commercial and industrial heat users.

Rob established Living Energy in 2003 and Wood Energy Australia in 2013, which, between them, have since installed over 40,000kW of wood-fired boilers at a range of different sites – from sawmills to swimming pools, schools, universities, hotels, and hospitals – putting them close to the forefront of this field.

Prior to getting hooked on wood energy, Rob worked on the Channel Tunnel in the UK (where he met his Kiwi wife) and then in the offshore oil industry in Europe and North America. He has now crossed from the dark side. Rob is passionate that NZ and Australia tap into the broad range of benefits that bioenergy can provide, and has been on the Board of the Bioenergy Association of New Zealand (BANZ) since its inception in 2001, and has held the role of Chair since 2008.

rob.m@livingenergy.co.nz | www.livingenergy.co.nz

Brian Cox Executive Officer Bioenergy Association



Brian has over 30 years' experience in identifying, investigating and developing commercial capital investment projects in the energy and infrastructure sectors. For the last decade Brian has been the executive officer of the Bioenergy Association of New Zealand.

The Bioenergy Association is a sector grouping representing all commercial, research and academic parties in New Zealand involved with wood energy, biogas and liquid biofuels.

Brian's role includes initiating and facilitating specific bioenergy

initiatives and providing support to the Wood Energy, Biogas and Liquid Biofuel Interest Groups who are the operational arms of the Association.

Brian works closely with individual members to ensure that the Association is providing best assistance to the member and their bioenergy business.

brian.cox@bioenergy.org.nz | www.bioenergy.org.nz

# Attendee profiles

Name of Attendee(s)	Brook Brewerton & than Heliwell		
Organisation / company	Azwood Limited		
E-mail address	brookb@azwood.co.nz		
Telephone number(s)	Phone: +64 (0)3 547 4836         Mobile:		
Please provide an outline of your activities / interests in relation to wood energy.			
Wood energy supplier			
What are you interested in finding out at the conference?			
General heating plant operations and meeting with industry partners.			

Name of Attendee(s)	Dominic van Berlo		
Organisation / company	Canterbury District Health Board		
E-mail address	Dominic.Vanberlo@cdhb.health.nz		
Telephone number(s)	Phone:         Mobile: +64 (0)27 591 3555		
Please provide an outline of your activities / interests in relation to wood energy.			
Maintenance manager at Burwood Hospital.			
What are you interested in finding out at the conference?			
New Burwood Boiler and other types of similar boilers in Christchurch.			

Name of Attendee(s)	Brad Coleman and Sam Lees	
Organisation / company	Organisation / company Canterbury Woodchip Supplies	
E-mail address	Sam.l@canterburywoodchip.co.nz	
Telephone number(s)	<b>Phone:</b> +64 (0) 3 696 3506	Mobile: +64 (0)27 555 9893
Please provide an outline of your activities / interests in relation to wood energy.		

Canterbury Woodchip Supplies provides wood energy in a form our clients request and their boilers require. We process primary timber streams using equipment of a nature and scale that results in a consistent chip size which can be tailored to whatever moisture content best suits the heat plant. We pride ourselves on offering a service that is both innovative and efficient for our customers located in the wider Christchurch region, South Canterbury and North Otago.

Name of Attendee(s)	Nicolas Cogan		
Organisation / company	Danone		
E-mail address	nicolas.cogan@danone.com		
Telephone number(s)	Phone: Mobile: +64 (0)21 756 045		
Please provide an outline of your activities / interests in relation to wood energy.			
We are considering the installation of a biomass fired heat plant at Danone Balclutha.			
What are you interested in finding out at the conference?			
I am interested in learning about biomass handling and boiler technology and to discuss the experience of existing operators.			

Name of Attendee(s)	Peter van Meer	
Organisation / company	EECA	
E-mail address	Peter.vanmeer@eeca.govt.nz	
Telephone number(s)	Phone:	Mobile: +64 (0)21 345 942

Name of Attendee(s)	Jo Chuan		
Organisation / company Enercon			
E-mail address	Jo.chuan@enercon.co.nz		
Telephone number(s)	Phone: +64 (0)3 281 8972         Mobile: +64 (0)220 188 791		
Please provide an outline of your activities / interests in relation to wood energy.			
Energy Engineer – We work with client in reducing energy consumption and costs, wood energy is a good avenue.			
What are you interested in finding out at the conference?			

Observe the operation of wood boilers, fuel storage, etc at various industry types.

Name of Attendee(s)	Rod Vardy, Barry Fairbrass, Chris Stevens		
Organisation / company	Lincoln University Property Services		
E-mail address	Marianne.richards@lincoln.ac.nz		
Telephone number(s)	Phone: +64 (0) 03 423 0820         Mobile:		
Please provide an outline of your activities / interests in relation to wood energy.			

As the Property Services department of Lincoln University, we are responsible for heating and energy for the Campus

What are you interested in finding out at the conference?

Options and technologies.

Name of Attendee(s)	Rob Mallinson		
Organisation / company	Living Energy Ltd		
E-mail address	Rob.m@livingenergy.co.nz		
Telephone number(s)	Phone: +64 (0)9 377 9007         Mobile: +64 (0)27 257 9001		
Please provide an outline of your activities / interests in relation to wood energy.			
Design, supply and installation of wood boilers from 30kW up to 30,000kW			
What are you interested in finding out at the conference?			
Always learning. Making contacts. Keeping in touch.			

Name of Attendee(s)	e of Attendee(s) Peter Judd   Michael Smith		
Organisation / company	Lyttelton Engineering		
E-mail address	-mail address <u>michael.smith@lytteng.co.nz</u>		
Telephone number(s)	Phone: +64 (0)3 328 8105         Mobile: +64 (0)21 912 253		
Please provide an outline of your activities / interests in relation to wood energy.			
Boiler manufacturer			
What are you interested in finding out at the conference?			

What we can offer to assist with bio energy use.

Name of Attendee(s)	Richard Ireland		
Organisation / company	Pioneer Generation		
E-mail address	richard.ireland@pgl.co.nz		
Telephone number(s)	Phone: +64 (0)3 440 0022	Mobile: +64 (0)27 733 2461	
Please provide an outline of your activities / interests in relation to wood energy.			
Producer and seller of wood fuel			
What are you interested in finding out at the conference?			
Networking and possible new ventures around Christchurch.			

#### Bioenergy Association Travelling Workshop, Christchurch – 29 September 2015

Name of Attendee(s)	James Malthus		
Organisation / company	RCR Energy Systems		
E-mail address	james.malthus@rcrtom.com.au		
Telephone number(s)	Phone: +64 (0)6 872 7634		Mobile: +64 (0)27 886 0500
Please provide an outline of your activities / interests in relation to wood energy.			

RCR Energy has a long history of providing wood fired energy plants for industrial sites in New Zealand and Globally. In addition to equipment suppliers RCR Energy also provides a comprehensive Servicing offer to support the installed base nationwide.

What are you interested in finding out at the conference?

Understand drivers behind installing wood fuelled heat plants plus hear 1<sup>st</sup> hand from the operators.

Name of Attendee(s)	Mark Lovegrove		
Organisation / company	Red Stag Timber		
E-mail address	mark.lovegrove@redstagtimber.co.nz		
Telephone number(s)	Phone: +64 (0)7 07 349 5877		Mobile: +64 (0)27 866 8041
Please provide an outline of your activities / interests in relation to wood energy.			

Biomass boilers generating high pressure steam around 20MW in size.

#### What are you interested in finding out at the conference?

Reputable suppliers, fuel handling systems, fuel mix variability – how installations deal with this. Keeping fuel dry. Network with other people in the industry.

Name of Attendee(s)	Doug Walker		
Organisation / company	Shirley Intermediate School		
E-mail address	dougw@sis.school.nz		
Telephone number(s)	<b>Phone:</b> +64 (0)3 389 7149		Mobile: +64 (0)21 02516214
Please provide an outline of your activities / interests in relation to wood energy.			

Caretaker

Name of Attendee(s)	Julian Dunn		
Organisation / company	Taylors Manufacturing Ltd (Taymac)		
E-mail address	julian@taymac.co.nz		
Telephone number(s)	<b>Phone:</b> +64 (0)3 389 7149		Mobile: +64 (0)21 779 407
Please provide an outline of your activities / interests in relation to wood energy.			

Boiler manufacturer

#### What are you interested in finding out at the conference?

Overall interest in the industry

Name of Attendee(s)	Jacob Kamminga	
Organisation / company	Zealandia Horticulture Limited	
E-mail address	jacob.k@zealandia.co.nz	
Telephone number(s)	<b>Phone:</b> +64 (0) 3 323 9898	Mobile: +64 (0) 027 83 85 288
Please provide an outline of your activities / interests in relation to wood energy.		

Nursery manager and operator of the Polytechnik woodchip boilers at Zealandia Horticulture. Growing back in Europe 6 different Energy Willow clones on 25ha medium wetlands and trails on 3,500m2 sandy soils (500mm rain/year no irrigation) with Miscanthus sinensis giganteus, Sida hermaphrodita, Fallopia sachalinensis and Populus (plantations 10-11 years old).

What are you interested in finding out at the conference?

To see and talk about what is happening on the bio energy market in NZ, what are the challenges and opportunities ?

#### We welcome your involvement in this Workshop.

Bioenergy Association PO Box 11595 Manners Street Wellington 6142

Email:	admin@bioenergy.org.nz
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