



IN THIS ISSUE

- **WELCOME TO THE 2013 CHRISTMAS NEWSLETTER**
- **INTRODUCTION - ANYA SEWARD**
- **IGSHPA EXPO IN LAS VEGAS 9TH AND 10TH OCTOBER**
- **CHRISTCHURCH GEOTHERMAL HEAT-PUMP WORKSHOPS 18TH NOVEMBER**
- **GEOTHERMAL USES DATABASE**
- **CHARTERED INSTITUTION OF BUILDING SERVICES ENGINEERS (CIBSE) AUCKLAND BRANCH MEETING 3RD DECEMBER**
- **ABSTRACTS NEED TO BE WRITTEN NOW FOR THE 2015 WORLD GEOTHERMAL CONGRESS**

WELCOME TO THE 2013 CHRISTMAS NEWSLETTER

There has been significant recent activity. It was a real pleasure to have Ed Lohrenz (GEOOptimise) visit New Zealand and to be able to structure several events in Christchurch and Rotorua around his visit. The installations using the ground as an energy store as part of the effective energy solutions that Ed has been involved with are inspiring.

Rick Smith (Parsons Brinckerhoff) and Glenn Ellis (Opus) presented at the Chartered Institution of Building Services Engineers (CIBSE) December Auckland branch meeting. Rick presented on Geothermal Heat Pumps – A Technology Overview and Glenn presented on the installation being designed for the Justice and Emergency precinct in Christchurch. More later in the newsletter.

In this newsletter Anya Seward introduces herself and reports on a number of recent events that have occurred. Thanks Anya for taking the time to write these up.

Happy reading and my very best wishes for Christmas and the festive season that is coming up very quickly.

Brian Carey – Chair GHANZ

INTRODUCTION – Anya Seward

Hi GHANZ community,

I thought I would introduce myself in the newsletter as I have been in contact with many of you over the past 12 months regarding GHP installation information for the national GHP database.

I am a geothermal geophysicist at GNS Science where my main area of research is thermal properties of rocks and soils with a special interest in low temperature geothermal and heat pump applications. GNS is compiling a database of direct use and GHP applications around the country seeking to establish a more accurate assessment of the “state of the nation”. There is a short article by Jonathan Hall on the great web application that has been constructed.

I look forward to further communication with you all over the coming months.

Anya



IGSHPA EXPO IN LAS VEGAS 9th AND 10th OCTOBER – Anya Seward

I recently attended the IGSHPA conference and Expo in Las Vegas, where designers, installers, marketers, researchers and manufacturers gathered to share their knowledge and updates in their specialities. The attendees were predominately from the USA, although there were a few of us from further afield with several presenting country updates. I was surprised to realise that although the markets in North America and Europe have been around since the early 1980s they continue to have significant competition from other low cost fuels.



The US Government have several tax incentives in place to help the GHP industry along, which has resulted in a marked increase in installations since 2008.

The Expo had over 50 booths of suppliers of such things as drilling products, grouting materials, thermal conductivity tools and piping. The workshop was attended by about 160 people with a wealth of GHP industry experience and knowledge. I found people very approachable, eager to learn and to share their knowledge. I highly recommend attending this workshop. It is being held next year in Baltimore, Maryland.

CHRISTCHURCH GEOTHERMAL HEAT-PUMP WORKSHOPS 18th NOVEMBER

EECA and GNS Science, in association with GHANZ, hosted a Christchurch workshop entitled "Geothermal Energy to Heat and Cool Buildings". Ed Lohrenz, from GEOptimize, based in Winnipeg, Canada, presented on topics covering generic GHP information, design processes, case studies and how the technology would benefit the city of Christchurch. Two sessions were organised, one focussing more on technical aspects and the other focussing on Christchurch. Tim Taylor, from EECA, also presented on the District Planning initiative for Christchurch.



The event was attended by over 50 people comprising engineers, installers, city councillors and planners. Lyall Smith, from Central Heating New Zealand did a fantastic job MC-ing the event. Thanks Lyall.

Thanks to all of those who attended and made the workshops such a success. I know Ed enjoyed learning more about New Zealand and the GHP opportunities we have here.

GEOTHERMAL USES DATABASE – Jonathan Hall

GNS Science has been constructing an interactive webmap of all the geothermal uses in New Zealand. This is helping to fulfil the need for a comprehensive inventory characterising New Zealand's geothermal resources. The data is broader than geothermal heat pumps and found in

the map are uses relating to electricity generation, geothermal heat pumps, and direct-use applications. Various tools are available to visualise the data from different perspectives

Visit <http://data.gns.cri.nz/geothermal> to see the site when it goes live at the end of December.

Go have a look. If your applications are not included then please contact a.seward@gns.cri.nz and provide her the details. Your data will appear when the database is next updated.

CHARTERED INSTITUTION OF BUILDING SERVICES ENGINEERS (CIBSE) AUCKLAND BRANCH MEETING 3rd DECEMBER – Rick Smith

I was invited by CIBSE to present an update of the "GHPs – A Technology Overview" presentation we rolled out around the country late last year. This was fortuitous since just prior to it one of the feedback comments we received on the GHANZ Strategic Plan draft was that we needed to establish strong ties with the Building Services industry.

The evening was hosted by Opus International Consultants at their Beaumont Street office and well attended by an audience of approximately 15. These comprised representatives from Opus, Beca, Fletcher and some smaller companies either supplying equipment or providing consulting services on efficient utilisation of energy in buildings.



My overview was well received and followed with a presentation by Opus' Glenn Ellis on the GHP technology currently being applied at the future Christchurch Justice and Emergency precinct. This is likely to be an open loop system utilising the natural ground waters flowing beneath Christchurch, which despite the cost of wells, will provide significant overall cost savings to a closed loop, buried tubing type system.



ABSTRACTS NEED TO BE WRITTEN NOW FOR THE 2015 WORLD GEOTHERMAL CONGRESS



It would be great to have a range of papers presented on geothermal heat pumps and using the ground as part of effective energy solutions. Please write your abstracts they need to be submitted by 31 January 2014.

[Submit Abstract](#)

Have a Great Festive Season

