<u>October 2019</u> NZGA Newsletter



WELCOME FROM THE PRESIDENT

Greetings to all from the New Zealand Geothermal Association. It is a pleasure to write to our members and provide an update of what the Association has been doing, what some of the activities in the geothermal space are, some highlights from our international connections and keeping our members informed and engaged.

I would like to welcome our new board members: Jacqui Nelson, Leighton Taylor, Greg Bignall and also acknowledge our Vice President Paul Siratovich who has been elected for a second term. We are also pleased to have Aroha Campbell join the board as an observer. The new board will take effect at the Annual General Meeting at the New Zealand Geothermal Workshop in Auckland at the end of November.

I wish to sincerely thank our outgoing board members for their great service to the NZGA: John Burnell, Andrew Rae and Katherine Luketina.

The end of the year sees the run-up to the NZGW which is highly anticipated by many across New Zealand and internationally. We will have a great line-up of international speakers this year. We will also host the International Geothermal Association (IGA) Board Meeting in Auckland following the workshop. I look forward to meeting with the IGA executive and how the NZGA and IGA can work more closely together to achieve higher member engagement and geothermal relevance both domestically and abroad.

In this Newsletter we will highlight some activities that may be of interest:

- Rotorua Geothermal Management Update
- NZGA mini-seminar held in Wellington
- IGA Board of Directors election results
- Scholarship for WING from Contact Energy
- NZGW keynote speaker announcement
- World Geothermal Congress preparations

We hope you enjoy this newly re-vamped newsletter.

NOTIFICATIONS

World Geothermal Conference 2020 Update

April 2020 is fast approaching and the planning for the NZ pavilion for the WGC in Reykjavik, Iceland, is progressing well.

A cohesive design concept is already in its initial stages, with a strong focal point for the NZ industry and some exciting input from an enthusiastic team.



We will be showcasing the design and formally launching a "Pavilion Package" at the NZGW in November. The Pavilion Package will include delegate passes, access to the pavilion, representation on the NZ WGC App, pre-event publicity, plus much more – watch this space.

There will also be a photographer at the NZGW if you require an updated headshot – note that we will require a headshot from those attending the WGC, please let Clair Scott (contact information below) know if you are interested in this service and I will send through further information.

For all other NZ Pavilion/WGC 2020 enquires, please do not hesitate to contact Clair on nzwgc2020@gmail.com.

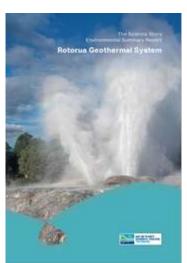
SPOTLIGHT STORIES

Geothermal management update for Rotorua Provided by Penny Doorman BOPRC

The Rotorua community, tangata whenua and stakeholders are being encouraged to get involved in early planning around the future management of the Rotorua Geothermal System. In September Bay of Plenty Regional Council held a series of hui, workshops and information sessions to gather feedback from the community. Over 100 people attended these events and provided their thoughts and suggestions to Council in some interesting and robust discussions.

Geothermal Programme Leader Penny Doorman says this community engagement is the first stage in a review of the Rotorua Geothermal Regional Plan. "Our monitoring tells us that we've made great progress over the past 20-30 years towards the recovery of the Rotorua Geothermal System. It's now time to take stock of where things are at, check in with the community about their values and priorities, and find ways to improve how we do things. It's about getting the best use out of the resource for the community, while protecting our vulnerable surface features".

To generate discussion, an Issues and Options Discussion Document, and a Science Summary with background information about the system have been prepared. Six key



issues have been identified, with a number of possible objectives and options designed to address these issues. Options include retaining the current policies for reinjection of fluid to protect surface features, seeking improved efficiency, and increased use of mātauranga Māori in management of the ngāwha.





The documents can be found on Council's website www.boprc.govt.nz/geothermal with midfeedback sought by will October. There be future opportunities to get involved, but if you missed out on the hui and workshops and would still like to meet with staff, you can contact Penny Doorman on penny.doorman@boprc.govt.nz.

WHATS BEEN HAPPENING

NZGA mini seminar in Wellington



On 26 September, the NZGA hosted a small seminar in Wellington for our members there as well as representatives of various governmental bodies. Brian Carey of GNS and Katie McLean of Contact Energy gave presentations to the attendees on "Direct Use opportunities" and "Geothermal operations Carbon footprint".

Brian presented a brilliant perspective on how

geothermal direct use heating has been making impacts in New Zealand and Munich, Germany as well as a pathway forward for New Zealand through the Geoheat Strategy. Katie's talk showed the carbon output of the actively producing geothermal power stations in New Zealand that will be presented as part of her NZGW paper with co-author and fellow board member, Ian Richardson.

Governmental representatives from MFAT, MBIE, Worksafe and the ICCC were present and good discussion around the future of geothermal in the zero-carbon landscape was a central focus. Links to social media highlights from the event can be found in the Summary of Social Media News.

International Geothermal Association Welcomes New Board of Directors

Voting has concluded and results presented for the IGA's board of directors and 25 inspirational figures have been selected by the international geothermal community. A wide range of backgrounds and expertise will join the board with 64% female representation. Six of these directors have strong ties to New Zealand and will help to maintain New Zealand's position as a powerhouse in the international geothermal space. Andrea Blair and Jane Brotheridge will serve another term on the IGA. Greg



Bignall and Paul Siratovich will be new board members. Elem Kaya and Angela Prieto will also serve on the board as representing Turkey and Columbia respectively but will maintain their strong connections with the New Zealand geothermal scene. Full details on the new IGA board of directors here:



https://www.geothermal-energy.org/the-iga-announces-ground-breakingresults-of-the-elections-to-its-board-of-directors-2020-2023/

Contact Energy Partners with WING



Contact Energy, one of New Zealand's largest generator/retail energy companies, is excited to partner with Women in Geothermal (WING), to encourage women to join the geothermal cound the world

community both in New Zealand and around the world.

Contact has entered into an Advance Global Partnership with WING and is one of two Global Partners. The Advance Global Partnership aims to advance women in the geothermal industry and get them ready for more challenging senior roles. By encouraging women into leadership roles WING and Contact expect to see positive benefits for the geothermal community. More women in senior positions provides diversity of decision making which is a benefit for the sector. Diversity of thought leads to better business decisions and more efficient processes. More on the press release here: <u>https://contact.co.nz/-/media/contact/mediacentre/2019/contact-partners-with-women-in-geothermal.ashx</u>

GNS Science awarded MBIE Endeavour Fund to investigate the next generation of Geothermal in New Zealand.

Geothermal is instrumental in achieving the goal of reducing carbon emissions but the critical challenge is to go beyond conventional geothermal to tap deeper, supercritical resources. Partnering with Contact Energy, Mercury, NTGA, and Tauhara North N2 Trust, we will characterise NZ's unique geothermal conditions, while drawing on the learnings of supercritical energy exploration worldwide (Japan, Iceland) to identify viable 'deep-heat' systems. Our research will boost regional development, supporting Māori-led geothermal opportunities. Integrating emissions capture, reinjection and/or sequestration simulations in the programme will achieve a stepchange in emissions reduction. Emissions capture innovation will also enable new high-value industrial applications, boosting export of lowcarbon know-how, and underpinning new industries with high-energy needs (e.g. hydrogen economy). More release on the press here: https://www.nzherald.co.nz/nz/news/article.cfm?c_id=1&objectid=12269865&fbclid=1w AR3MhyDmSiFyCBi-3CB2QMPJD2tUG11autgszxT1qpHW5Khis6TGtDGQ3r0

SUMMARY OF SOCIAL MEDIA NEWS:

The association maintains three social media channels on Facebook, LinkedIn and Twitter. We use these channels to communicate updates and engage with our members and the wider community that might be interested in hearing from us and engaging with us on social media. Below are the links to our latest social media posts from LinkedIn (click on the images).





WHATS GOING ON IN THE WORLD:

http://www.thinkgeoenergy.com/seequent-releases-update-to-its-3d-modellingleapfrog-geothermal-software/

http://www.thinkgeoenergy.com/government-of-bavaria-germany-announces-geothermal-master-plan-to-push-development/

http://www.thinkgeoenergy.com/groundbreaking-results-for-the-international-geothermal-association-board-of-directors-2020-2023/

https://geothermalresourcescouncil.blogspot.com/2019/10/mexico-geothermal.html

WHATS COMING UP...



NZGW 2019 "Innovation and the future of Geothermal in a Low Carbon World"

The 2019 Workshop will be held at the Owen G. Glenn Building, at the University of Auckland, 25-27 November 2019. Find all the details <u>here</u>.

International Keynote Speakers will bring a breadth of expertise and intriguing topics to the NZGW this year:

- Katherine Young (National Renewable Energy Laboratory) "Innovating Geothermal Wells"
- Novi Ganefianto (PT Supreme Energy) "Current Status and Future Planning of PT Supreme Energy Geothermal Working Areas, Indonesia"
- Patrick Walsh (Ormat Technologies Inc.) "Technical and economic development of high enthalpy upflow and low enthalpy outflow in volcanic and fracture-controlled geothermal systems"
- Sara Montomoli (ENEL Green Power) "Geothermal exploitation in Enel Green Power

 a history of sustainable development and new challenges for the future"

More information on the keynote speakers can be found here: <u>https://www.geothermalworkshop.co.nz/programme/keynote-speakers-2/</u>



WORLD GEOTHERMAL CONGRESS 2020 REYKJAVIK

2020 World Geothermal Congress

WGC 2020 is just under a year away!

Held 24 – 30 April 2020 in Reykjavik, Iceland.

Registration is open.

The NZGA has been working closely with Geothermal New Zealand to support a unified delegation of New Zealand companies with support from NZTE and MFAT. Preparations are underway for a collective booth design and sponsorship that will help highlight the New Zealand presence at the Congress in Reykjavik.