



IN THE LOOP

The latest news and updates from the Ontario Geothermal Association

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AECON



STS Geothermal

VERSAPROFILES

Water-Furnace
Distributed by Eden Energy Equipment

SUSTAINING PARTNERS

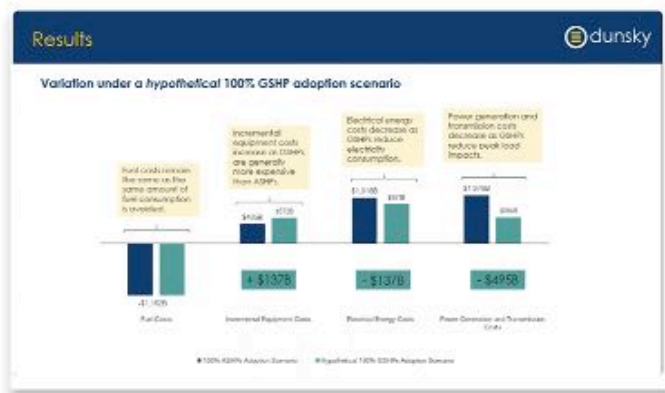
President's Message

This year has been a difficult test for humanity and for many of us as individuals, worrying about people close to us, adapting to much different living and working arrangements. Perhaps as we head toward 2021 there is a little bit of light at the end of the tunnel.

A vaccine may come available, clean energy seems to have continued to grow during the downturn, and the election result in the USA may lead to an improved outlook for greener building systems.

ONLINE ANNUAL GENERAL MEETING

This month the OGA held our Annual General Meeting online, which also offered hopeful signals for the future. A main feature of the meeting was a presentation by Jean Phillippe Hardy, Senior Consultant with Dunskey Energy Consulting, who explained some of the details of the research company's recent findings regarding the electricity system costs and system capacity capability under beneficial electrification scenarios in Canada.



The report found that if just 10% of Canadian homes adopted ground source heat pumps, Canada's electric system would save \$36 billion and would not suffer peak usage strain. If adoption is higher the savings increase. They also increase under the coldest weather conditions.

The online AGM software used with the support of the HRAI accommodated a robust question and answer session among members, following Jean Phillippe's report.



ENERTECH WILL FUND DUNSKY PHASE 2

In our last newsletter I thanked the sponsors who helped fund this phase 1 report by Dunskey, and during our AGM we were able to recognize and thank Enertech Global of Greenville Illinois, part of the NIBE Group of Companies of Markaryd, Sweden.

Enertech has agreed to financially support phase 2 which will explore recommendations on actionable policies and regulations to increase the use of ground source heat pumps in Canada, based on best practices around the world.



Steve Smith, the CEO of Enertech also made an appearance at our AGM, expressing enthusiastic support for the work that OGA and Dunskey are doing to advance the ground source industry and reinforcing the importance of advocacy work during times of technological change.

This message continues on page 3.

President's Message

ADVOCACY IS GOING WELL

The HRAI's VP Government & Stakeholder Relations, Martin Luymes, was also a speaker at our AGM and he brought encouraging news about advocacy efforts in several areas. He reported that positive reviews continue to accrue from key individuals from five Federal ministries who participated in our OGA webinar this past June. With the Federal government and many cities seeking ways to meet climate commitments, there is now a thirst for information on viable decarbonization strategies.

"In all our discussions with Natural Resources Canada and the Ministry of the Environment & Climate Change Canada, the tone seems to have become more positive, regarding ground source systems." He said the intention to remain committed to a green recovery continues in most Federal government conversations.

"The tone seems to have become more positive, regarding ground source systems."

He mentioned language in the Speech from the Throne and Federal government budgets, which promised programs that are expected to result in high level support for building upgrades, and also spoke of 'slow but steady progress on the Market Transformation Roadmap,' which is designed to address obstacles to clean energy advancement.

He said that HRAI has been working with the government on a skills development plan for the clean energy transformation. In addition, there has been something of a reconnection with Enbridge regarding interest in ground source, although it is too soon to say where it might lead. Later in the AGM Vice President Jeff Hunter said that the marketplace is warming up to geo and that even the Provincial government was showing signs of receptivity to a green recovery approach. Again, early days.

JOHN BOSMAN STEPS DOWN

My thanks to Jeff for hosting the AGM event and to members who attended or sent proxies, allowing us to approve minutes, agenda and finances, and ratify our slate of Directors. This year's Board brings some notable changes. John Bosman, a long-time Director and former OGA President has stepped down, after devoting many years to the organization. John deserves our profound thanks for the many positive contributions he has made to our industry and to the organization.



John Bosman, Gaston Minetti and Tim Weber.

Gaston Minetti of The Green Method and Tim Weber of Diverso Energy have now joined the OGA Board. Both have been active in our sector for many years and will be valuable additions. Congratulations and welcome to Tim and Gaston.

Our best wishes also to Bruce Nagy, who has served as Communications Director for the OGA for the past few years. Bruce will remain as a friend of the OGA, but will no longer be working on day-to-day communications, as he dedicates more time to his next book on clean energy, and his other environmental pursuits. Jeff Hunter is working on a new structure for future OGA communications.

In general the picture seems to be getting brighter for our organization. I hope the same can be said for our members and friends. Stay safe and all the best.

Stan Reitsma
OGA President

Water source for new ASHRAE headquarters

The American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) has moved into its new global headquarters in Atlanta following extensive renovations of an existing 66,700 square foot building in Peachtree Corners, Georgia. The building is located next to a lake and six water source heat pumps combined with radiant ceiling panels provide conditioning for the space.



“ASHRAE’s new global headquarters is a prime example of (making) net-zero energy the ‘new norm’ in sustainable design and construction,” says ASHRAE Building Ad Hoc Committee Chair Ginger Scoggins.

With the organization expected to show leadership by example, it cleverly chose a retrofit option rather than new construction. “Re-use of existing structures is a basic tenet of sustainability – the energy performance of existing buildings must be addressed to substantially impact the 40% of primary energy consumed by buildings,” says Scoggins.

ASHRAE began renovations in January of this year and the structure was designed as a “living showcase of what’s possible through technology integration to increase efficiency, protect people and property, and enhance the occupant experience,” says ASHRAE President Charles E. Gullledge III.

Technology used in the project in addition to the water source heat pumps and radiant ceiling panels includes enthalpy heat recovery, demand control ventilation, Building Information Modeling, a Building Automation System integrated with other systems, an online dashboard for remote monitoring and analysis of building performance, on-site electric vehicle charging, roof-top and ground mounted photovoltaic solar energy, 18 new skylights and reconfigured window/wall ratios.

FUNDING SECURED FOR CREATING MUNICIPAL GEOTHERMAL GUIDELINE

The OGA has succeeded in securing funding for development of a geexchange guideline document for municipalities in the Province of Ontario to support understanding of the drilling process and standards which protect local water supplies and aquifers. Paul Frith of GeoSource, who is spearheading the initiative, says cities are more interested than ever before in ground source systems and geothermal fields, and are seeking clarification. They also need specification reference material for procurement purposes.

Initial funding will be provided by The Atmospheric Fund. The document will be prepared by Brian Beatty, who holds a Bachelor

of Engineering (P.Eng.), Hydrogeology, and has extensive experience with both open and closed loop systems. There will be oversight by the Ontario Geothermal Association with academic peer review upon completion of the guideline.

Working partnerships are likely to include OGA members, the City of Toronto and some other municipalities, Ontario Ministry of Environment, Conservation and Parks. Dissemination support is expected to come from the Clean Air Partnership, the Association of Municipalities of Ontario, the Canada Green Building Council, the Heating, Refrigeration and Air Conditioning Institute of Canada and the Building Owners and Managers Association.



STS Geothermal: A new Canadian full service geothermal/shoring team

STS Geothermal is a new collaborative venture created by shoring and drilling professionals Turnkey Shoring Solutions and Subterra Renewables, that results in a group with broad expertise that can manage the entire excavation and sub-grade process. In addition, according to Vice President Matthew Tokarik, the synergies between the two teams are resulting in innovative approaches to the areas within the new STS offering.

“We’ve secured the exclusive rights on some new geothermal drilling technology used in Europe and Australia from Soilmec Italy and their engineering team,” says Tokarik. “In doing so we’ve expanded our equipment fleet by adding more SR-45 drill rigs with this proprietary equipment, to maximize our drilling speeds and depths.”

TORONTO TOWN HOMES

The new combined expert team and technical resources are contributing to a boost in morale, along with exciting projects such as the Clonmore Urban Towns in east Toronto’s Birch Cliff neighbourhood between Danforth Avenue and Gerrard Street near the storied Beaches area, and quickly developing Leslieville.

The project consists of 42 boreholes at about 850 feet, providing 140 tons of cooling and heating for 118 stacked condominium townhomes. It will become a company project under a utility model arrangement, which means STS will own, operate and maintain the energy system on behalf of the condo corporation. Homeowners will pay less for their utilities, and enjoy greater stability, and the ownership of the system will transfer to the condo at the end of a long-term contract.



UTILITY MODEL

“On top of being able to provide commercial shoring, earth retention and geothermal drilling under one umbrella, we now have strong system finance and operation capabilities, integrated geothermal system development and project management. And we are also positioned for some asset acquisition or capital partnership arrangements.”

“Our resulting financial strength was a key driver for the merger. Being able to offer the utility model or enter these other arrangements will expand our markets. Condominium

developers, institutional clients and apartment builders are all responding to the tailwinds of the Paris climate accord, and for example, the Toronto Green Standard. Under the next version of the TGS, builders will have to install triple pane windows, heat pumps, or both. With our utility model they get the heat pumps and other energy system components for free. It really becomes a no-brainer.”

OAKVILLE HIGHRISE

STS is also providing geothermal drilling and a utility model for the Branthaven Homes Upper West Side 2 project in Oakville, Ontario, at Trafalgar Road and Dundas Street. It includes 356 suites in a 22-storey high-rise and 77 boreholes at about 830 feet each. They will provide about 375 tons of cooling and heating to vertical stack 1- 2 ton heat pumps in each unit.

“These are great projects for geothermal and there are many more in the works,” says Tokarik. “We are hoping to expand into the United States as well. There is a lot of opportunity in the space and we think our time is now.”

ADVANCED SHORING, DRILLING, AND GEOTHERMAL SOLUTIONS

STS Geothermal is a new collaborative between shoring and drilling experts Turnkey Shoring Solutions and Subterra Renewables, a large-scale geothermal heating and cooling developer. We offer engineering, installation, and project management for shoring and earth retention systems, specialized drilling projects, and advanced geothermal exchange systems for commercial and residential properties.

- Geothermal drilling
- Commercial shoring and earth retention
- Geothermal systems development, design and project management
- Geothermal system operation -Utility model/long term energy service agreements
- Capital partners for assets/projects

STS Geothermal

POWERED
BY



SUBTERRA
RENEWABLES



From your outgoing comms director

I'm a storyteller – a journalist, author, filmmaker; and I approached the OGA a few years ago and became involved because I believe that what the people who read this newsletter are trying to do is among the most noble of human pursuits - finding practical ways to solve serious global problems like climate change. And I have learned that telling success stories is a critical part of creating change in this world. Please keep telling your stories.

You who have been the courageous ones, who have ignored the naysayers and moved forward, to me you are the smartest, most ethical people on the planet, and deservedly, your efforts are beginning to pay off. I'm not talking about geothermal per se, but about the manifestation of many encouraging directions in the clean buildings, clean transport and clean power sectors. Still, although we are moving in the right directions, we need a great deal more momentum. We must ramp up. Please keep up the fight. You are on the right side of history.

I'm now leaving much of the day-to-day OGA communications to work on my next clean energy book, but I'll try to remain involved and will support the organization in my journalistic and other activities. All the best to everyone.

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Free E-Newsletter Subscription

Keep up-to-date on changes to the industry. Sign-up for our monthly e-newsletter by e-mailing office@ontariogeothermal.ca.

OGA Membership

Take advantage of member benefits such as province and nation-wide recognition on HRAI's online contractor locator, discounted OGA conference rates, exclusive industry deals & HRAI news updates. Learn more [here](#) or get in touch by contacting 1-(800) 267-2231 or sales@hrai.ca.

New & Current Members

Check out our list of current OGA member companies and brand new member recruits [here](#).

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More Information

Contact office@ontariogeothermal.ca for more information on the Ontario Geothermal Association.

Association Partner

