June 2021

IN THE LOOP

THE LATEST NEWS AND UPDATES FROM THE ONTARIO GEOTHERMAL ASSOCIATION

IN THIS ISSUE

Partner Spotlight:

Eden Energy Equipment

Eden Energy Equipment Limited was established in 1981 as a wholesale/distribution company to service specialized markets in the HVAC industry. With over 38 years of experience in the industry, we are able to work collaboratively with residential, commercial, and industrial clients within North America. Our principal customer base is located in Ontario.

Supporting Partners:

AECON | GeoExchange Solutions Inc. | GEOSOURCE ENERGY INC | SUBTERRA RENEWABLES | VERSAPROFILES | Diversso energy A Geothermal Utility Company | WaterFurnace Distributed by Eden Energy Equipment

FROM THE EDITOR

The first half of 2021 has been full of activity for the OGA. We've started to spread the word about the Dunsky study released last fall titled "The Economic Value of Ground Source Heat Pumps for Building Sector Decarbonization." The study demonstrated the specific value that GSHPs deliver to managing electricity grid costs as Canada pursues a strategy of electrification of heating systems. I am excited to report that the second phase of the study will be released later this month. The second report will deliver informed recommendations on proven policy measures that can assist in positioning geothermal more prominently in buildings sector electrification strategies.

The planned de-carbonization of space heating and water heating in buildings in Canada has prompted reactions from sectors that will be hurt by that transition. Canadian Gas Association (CGA) President and CEO Timothy Egan recently wrote an opinion piece in the Financial Post where he again stated that the cost of electrification in Canada would be a monumental $1.4 trillion. This figure was the original estimate presented in the ICF study titled "Implications of Policy-Driven Electrification in Canada," commissioned by the CGA in 2019 and it is the study that prompted the geothermal sector to call for a re-think, which led to the Dunsky study.

What Mr. Egan again neglected to tell readers was that the CGA study pointedly omitted ground source heat pumps, which are far more effective than their air source cousins in managing peak electricity load on the coldest days of the years. The Dunsky study re-worked the ICF analysis, using all the same scenarios and assumptions but adding GSHPs as an option. The study concluded that the necessary investment in grid capacity could be reduced by hundreds of billions of dollars – in fact, for every GSHP system installed, there would be a $40,000 reduction in needed system investment. Dunsky also pointed out that the ICF study omitted consideration of other technologies (e.g. electricity storage) that would help to manage peak electricity demand – the prime driver of new electricity generation costs. The $1.4 trillion estimate is a shaky number for these and other reasons.
Mr. Egan and the gas industry want Canadians to believe that the cost of electrifications is too steep for the country to absorb. The OGA is more optimistic about our prospects. The pathway to a zero-carbon energy future will be difficult, but there are solutions available today that will make the transition smoother. The OGA will share the results of the Dunsky study with key audiences, on the belief that Canadian policy makers should have all the facts as they plan for our future energy systems. Let's give them the whole story so they can make informed decisions!

I am genuinely excited for the second half of 2021 as the OGA continues its advocacy and education efforts in Canada. Well, that and a 2nd dose summer seems pretty exciting. We must meet our commitments to climate action and support the global community in our collective efforts to reduce emissions. Our energy choices for space conditioning and water heating should be evaluated and selected based on the parameters essential to the world in front of us, not for the one in the rearview mirror. The technology to meet our zero-emission space conditioning and water heating needs is available today. The OGA, its members, and the industry at large are innovating every day, implementing these solutions in Canadian buildings.

Please enjoy this month's edition and stay tuned to our social channels for updates!

- Jeff Hunter

IN THE NEWS

Canada Greener Homes Program Announcement

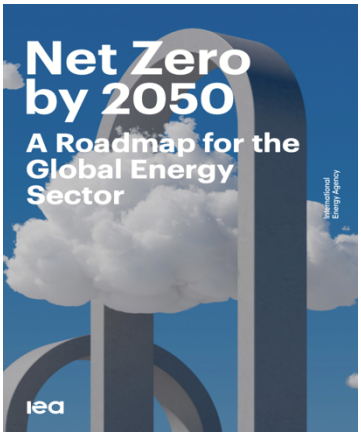
Natural Resources Canada announced the Canada Greener Homes Program on May 27th. The Canada Greener Homes Grant will help homeowners make their homes more energy-efficient, create new jobs across Canada for energy advisors, grow our domestic green supply chains and fight climate change.

Retroactive to December 1, 2020, up to 700,000 Canadian homeowners are eligible for grants of up to $5,000 and up to an additional $600 to support the cost of an EnerGuide home energy evaluation. Applicable Ground Loop and Ground Water Heat Pump applications have been included within the program. Please see Canada Greener Homes Grant website for details:

▶ **READ THE FULL STORY HERE:**

https://www.nrcan.gc.ca/energy-efficiency/homes/canada-greener-homes-grant/23441

IEA releases telling report on pathway NetZero 2050



IEA released it's NetZero by 2050 report in May, titled "a Roadmap for the Global Energy Sector". The report Identified a total transformation of all economic sectors to reach NetZero by 2050. In the buildings sector, in order to reach NetZero by 2050, IEA projects emissions will need to drop by 40% to 2030 and more than 95% to 2050. By 2030, around 20% of the existing building stock worldwide is retrofitted and all new buildings comply with zero-carbon-ready building standards. Over 80% of the appliances sold are the most efficient models available by 2025 in advanced economies and by the mid-2030s worldwide. There are no new fossil fuel boilers sold from 2025, except where they are compatible with hydrogen, and sales of heat pumps soar. By 2050, electricity provides 66% of energy use in buildings (33% in 2020). Natural gas use for heating drops by 98% in the period to 2050.

▶ **READ THE FULL STORY HERE:**

https://www.iea.org/reports/net-zero-by-2050

Efficiency Canada - Canada's Climate Retrofit Mission

Efficiency Canada just released this report which outlines "a climate retrofit mission for Canada". Haley, Brendan & Ralph Torrie. 2021. Canada's Climate Retrofit Mission. Ottawa:

Efficiency Canada. The authors quantify the retrofit potential and demonstrate the scale required to confront the climate emergency. They further consider why the current market and policy structures for building retrofits must be transformed. This is a must read report for anyone looking to understanding deeper the Canadian pathway to achieving our GHG emissions reductions targets.

▶ **READ THE FULL STORY HERE:**

https://www.efficiencycanada.org/wp-content/uploads/2021/06/Retrofit-Mission-FINAL-2021-06-16.pdf

ADVOCACY @ OGA

Mayors Megawatt Challenge Webinar - Optimizing Geothermal Installations in Existing Municipal Facilities

This webinar explored geothermal in existing municipal facilities, including factors for successful installations, as well as common issues encountered with existing systems and how they can be addressed. Procurement was discussed, including what municipalities should be asking for to ensure successful installations.

▶ **READ THE FULL STORY HERE:**

https://mayorsmegawattchallenge.com/mmc-events/optimizing-geothermal-installations-in-existing-municipal-facilities/

TAF & OGA developping Geo-exchange drilling Guidelines

The Ontario Geothermal Association (OGA) has engaged into a project funded by The Atmospheric Fund (TAF) to prepare a geo-exchange guideline document. The guideline will provide a detailed technical review of geo-exchange drilling operations, recommendations for municipalities integrating geo-exchange into their development application and approvals process, mandatory drilling measures to ensure aquifer protection and more. The OGA is consulting with representatives from the public sector, industry and academia. It is expected that the guideline will be completed this coming fall.

Efficiency Canada Webinar - Reframing the Policy Discussion on Geothermal Heat Pump Systems

A recent study by Dunsky Energy Consulting highlights the unique benefits of ground source heat pump (GSHP) systems to the long-term development and management of a sustainable electricity grid.

The study shows that the societal benefits go well beyond the known benefits of GSHPs to reducing energy use and carbon emissions. The implications for system planning are substantial and warrant closer consideration by policy-makers.

This session which was presented by Martin Luymes (HRAI) and Jean-Phillipepe Hardy (Dunsky Energy Consulting) summarized the study's findings and included some discussion of key policy tools that can aid in making these benefits a reality, based on a survey of other jurisdictions. A detailed analysis of these policy tools will be released in a second Dunsky study commissioned by HRAI/OGA shortly.

▶ **READ THE FULL STORY HERE:**

https://www.efficiencycanada.org/geothermal-heat-pump/

PARTNER SPOTLIGHT

Eden Energy Equipment

Through extensive experience and knowledge of HVAC systems, we work seamlessly with our clients to meet or exceed their needs and provide comfortable solutions for an array of unique issues.

What To Expect

Eden Energy's success is based on providing exceptional levels of customer service and quality of products. Unlike other companies, we have a long-established leadership team. When you get to know our team, you can expect that the relationship you build will last. We are continually looking at the latest approaches and innovations in the industry to adapt to the current climate.

With a proximity to many major marketplaces, a commitment to stocking large quantities of service parts and equipment, we have been an industry leader. Eden Energy boasts a large variety of products and services, ranging from geothermal heat pumps, boilers, heat recovery ventilators, wireless controls, to training and designing support for our customers. We run monthly online training events with world recognized trainers. Since October of 2020 we have had over 5000 participants in our training sessions.

"Eden Energy is our go to supplier. Their product knowledge and technical support is second to none...Eden can design and provide a list of everything needed for your next project. I recently had a boiler system go down on the weekend. I called Michael on Saturday and not only did he bring me the part but was happy to do so. I can't say enough good things about Eden Energy." -

Tyler @ TJL Mechanical

Partnerships

Eden Energy Equipment has partnered and built a close relationship with a variety of principal corporations in the HVAC industry. Along with being the top distributor for WaterFurnace geothermal systems, we were the first vänEE distributor in North America, and lead the market with our knowledge of many different systems and products.

WaterFurnace Innovations

Eden Energy has been the official distributor for WaterFurnace geothermal products in Ontario for over 20 years. With WaterFurnace's recently introduced Wi-Fi based comfort platform, Symphony, you can manage the comfort system in real-time and control it from any web-enabled smartphone, tablet or computer.

Our Approach

Even though Eden Energy Equipment is a large distributor, we take pride in our ability to provide a personal touch to everyone we work with. We take an innovative approach to distribution, by offering sales and design assistance, warranty, and technical support all within our office.

You deal with one source for all your needs and get to know our team personally to build a lasting relationship. Working together with an extensive network of industry professionals, we have the capability to assist you with every step throughout the process of any projects that you bring our way.

Eden Energy Equipment is committed to promoting a professional environment and ensuring the satisfaction of clients. To find out more, visit our website at http://www.edenenergy.com/

EEE Eden Energy Equipment

TRUST THE EXPERTS

Eden Energy Equipment Limited was established in 1981 as a wholesale distribution company to service specialized markets in the HVAC industry. The success of Eden Energy Equipment is based on exceptional levels of customer service and superior products. Although we have been an industry-leader for over 40 years, we are contnually looking at the latest approaches in all we do.

Our team has decades of experience and is here to provide the complete solutions our partners need. Reach out and let us show you the difference that our team delivers.

WaterFurnace®
Smarter from the Ground Up™

1-800-665-3336 x 123

www.edenenergy.com | info@edenenergy.com

TRAINING

Geothermal 101

July 15, 2021
12pm - 1pm EST

▶ REGISTER HERE

Electrification of space conditioning systems in Canadian homes and buildings has been identified as a key strategy to help meet international climate change commitments and GHG emissions reductions targets. Natural Resource Canada recently launched the Greener Homes Program, which includes homeowner incentives for Heat Pumps. Heat Pumps have been used in space conditioning and water heating systems for decades. Ground Source Heat Pumps specifically, will play a critical role in buildings sector decarbonization as their consistently high performance, especially in peak heating and cooling conditions, will help mitigate electricity grid upgrade and expansion costs. This 1-hr session will inform the audience about the basic system designs, components, and installation considerations for residential applications. The session will be ideal for HVAC contractors interested in pursuing installation of GSHP systems.

Let's keep in touch

office@ontariogeothermal.ca
www.ontariogeothermal.ca

Follow us

@ogacanada

Ontario Geothermal Association