

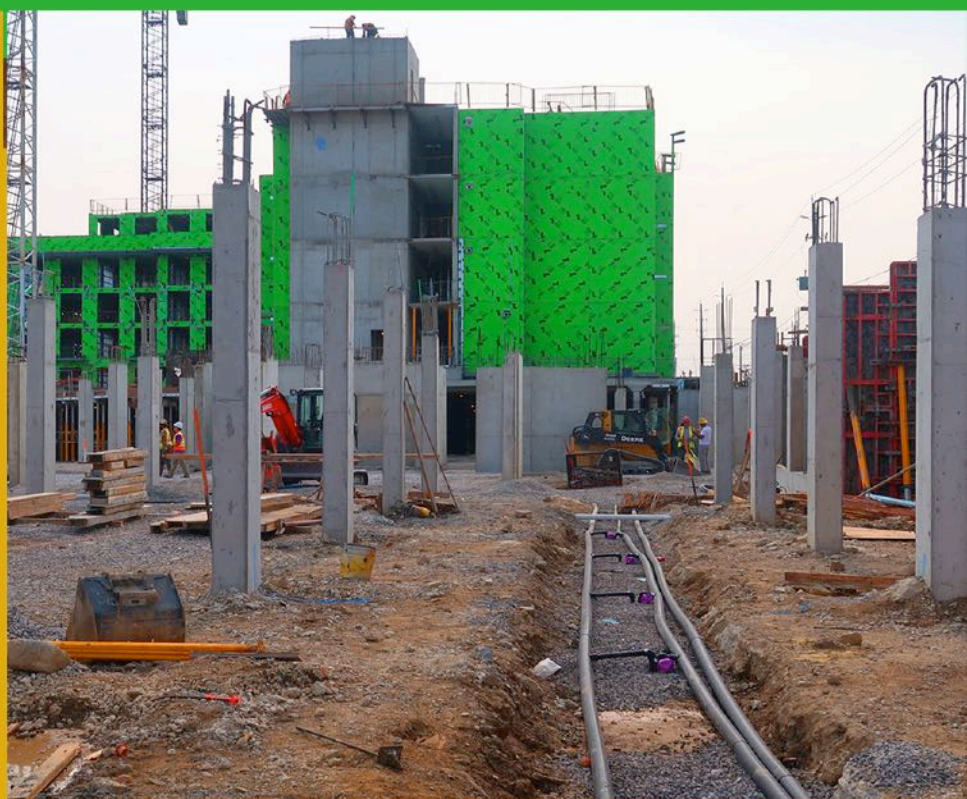


# IN THE LOOP

The latest news and updates from the Ontario Geothermal Association

## IN THIS ISSUE

President/Dunsky Report	2
News	3
SPP Profile	4
New Partners	6
OGA	7



**AECON**



SUSTAINING PARTNERS



## President's Message

There is, of course, other news in this newsletter, but for the OGA this is a very important development. - *Stanley Reitsma, President*

### WE CAN GET THERE FROM HERE

New study shows electrification of buildings in Canada can be met with ground source heat pumps

**SEPT 22, 2020** - A new study conducted by Dunskey Energy Consulting highlights the unique advantages of ground-source heat pumps, not just to individual building occupants, but to the electricity system, as Canada prepares to electrify buildings and reduce carbon emissions. As in other jurisdictions, Canada's electricity grid and power supply capacity must be capable of meeting peak demand.

Plans to replace our current reliance on carbon-based fuels with electric modes of heating have created legitimate worries about how to ensure capacity to meet demand spikes.

**"High ground source heat pump efficiencies will help mitigate the peak electricity generation requirements of the grid."**

The study concludes that if the heating of homes and buildings across Canada were electrified using ground source heat pumps rather than air source heat pumps (which have been assumed as the default in most electrification scenarios) the avoided total societal cost of electrification would be \$357 billion over the next 30 years. That's because very high ground source heat pump efficiencies, unaffected by outdoor temperatures, will help mitigate the peak electricity generation requirements of the grid.

"Switching just 10% of homes to ground source instead of air source heat pumps may save \$36 billion," said Stan Reitsma, President of the OGA, "which equates to a net savings of more than \$28,000 for every household choosing this option, and that's after allowing for the cost of installing these systems."



*Dunskey study will soon be available for download at [Ontariogeothermal.ca](http://Ontariogeothermal.ca)*

Said Martin Luymes, VP of Government and Stakeholder Relations at HRAI. "While the latest air source heat pumps perform at impressive efficiencies, a unique benefit of ground systems is their ability to perform consistently at high efficiencies regardless of outdoor air temperatures, due to their reliance on more stable thermal energy stored in the ground. Deployed at scale they will effectively 'flatten the curve,' reducing peak electricity demand for the whole grid."

The Dunskey study quantifies the system-wide benefits of this technology, demonstrating that the avoided electricity system development costs will more than pay for the investment in these heating systems. "The results confirm that the goal of decarbonizing heating in Canada can indeed be met without requiring massive electricity system upgrades," said Reitsma, "if we start investing now in smart technologies like ground source heat pumps."

The analysis was commissioned by the Ontario Geothermal Association (OGA) in partnership with the Heating, Refrigeration and Air-conditioning Institute of Canada (HRAI), partly as a review of another analysis undertaken by the ICF in Fairfax, Virginia, which suggested electrification would overwhelm electricity grids. But the Dunskey analysis found questionable use of data in the ICF document, and disputes this assertion.

The Dunskey study will soon be available for download at [ontariogeothermal.ca](http://ontariogeothermal.ca)

## TAF gets \$40 million for green buildings

The Atmospheric Fund (TAF -Formerly Toronto Atmospheric Fund) is well respected for having been studying green buildings and funding projects for many years, while using smart financial management to preserve its war chest. TAF has recently received \$40 million more through a plan developed over three years with the LC3 network, the Government of Canada, the Federation of Canadian Municipalities (FCM), and the City of Toronto.

TAF is currently working on deep energy retrofits to more than 400 buildings in the Toronto and Hamilton region, and with help from the new funds, hopes to increase this to 1600 buildings. It has identified key technologies as ground source and air-source heat pumps, photovoltaic panels, LED lighting, air sealing and weatherization measures.

### GEOTHERMAL COOLING GROWING IN GEORGIA

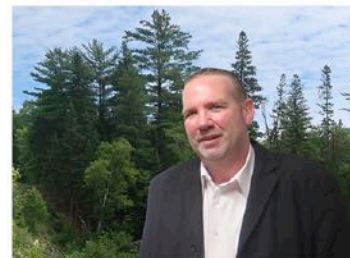
“It has really picked up steam in the last two years,” says Steve Allie, Serenbe’s on-site building manager. It’s easier to sell units with green features, compared with 15 years ago.” He is overseeing construction of Mado, Serenbe’s third neighborhood, consisting of 200 homes near Atlanta, plus a community centre containing a vegan restaurant, wellness center and yoga room.

Most of the homes in Serenbe are cooled and heated by WaterFurnace or Bosch ground source heat pumps, with one or two 400-600 foot deep boreholes for each residence. A three-story community building and a few nearby homes are cooled by a 150-ton water source loop in a deep nearby pond. Mechanical designer Tim Uzur explains that the heat sink was achieved using a device that looks like a big stainless-steel radiator, called a slim-jim, but that they sometimes rust, and he recently replaced one with plastic piping.

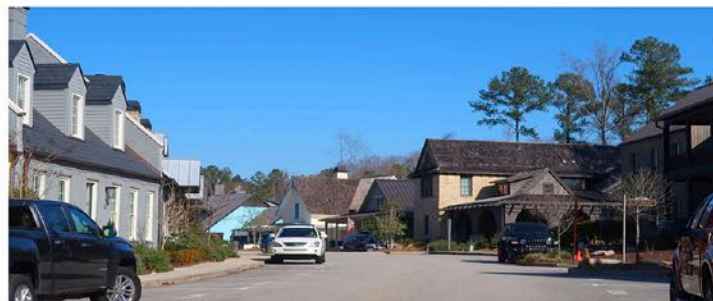
“One of the big advantages is that noise pollution is eliminated because there are no loud compressors outside. You can hear the birds sing. People really like that.”

### VOLUNTEER AWARD

Congratulations to Paul Frith, Director of Advocacy and Sales, Geosource Energy. Paul recently won the Volunteer Leadership Award for the Greater Toronto Chapter of the Canadian Green Building Council. Said CaGBC:



“Paul has been a tireless advocate for CaGBC’s Greater Toronto Chapter. His fundraising and organizational work as co-chair of the Chapter’s Drive for Change golf tournament committee has been a pivotal factor in the event’s success over the past four years. Paul’s efforts in support of this and other CaGBC initiatives have served to strengthen and broaden the organization’s network in the Greater Toronto Area.” Paul has also been a great asset to the Ontario Geothermal Association, helping organize our annual conference, recruiting speakers, and acquiring sponsorships. We are lucky to have him on board. Congratulations Paul!



In 2017 the Global Wellness Institute estimated the green themed real estate business to be worth more than \$52 billion in the US, and \$134 billion around the world. It predicts growth to \$180 billion by 2022.



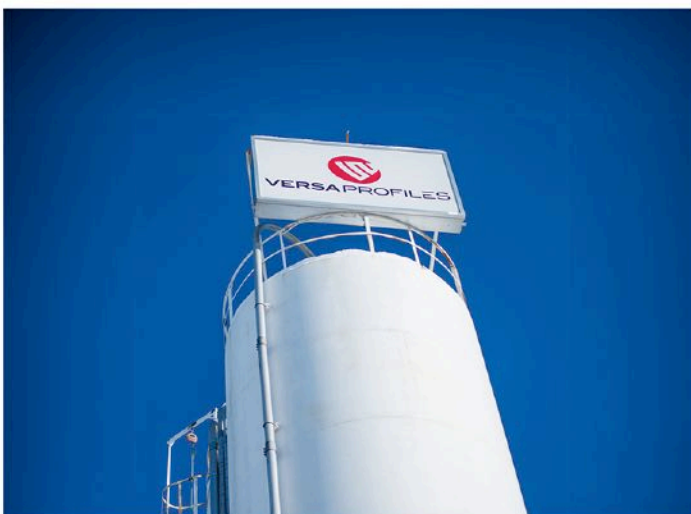
## Versaprofiles: A Canadian success story

In 2019 Versaprofiles won a significant contract for the Vancouver Airport expansion that improved its resources and increased its profile in the marketplace. This success has led to about \$4 million in recent production enhancements.

Serge Mercier, sole proprietor of Versaprofiles since 2017, and president since 2011, has recently created a generational succession and reorganization plan to keep the company on solid footing well into the future. Sales manager Philippe Côté and director of administration and finance Chantal Guillemette have become co-shareholders, along with financier Desjardins Capital. Mercier will remain as CEO for the foreseeable future.

“I’m so proud to see Chantal and Philippe become co-shareholders. Combined, they have 18 years of experience at Versaprofiles,” says Mercier. “I really wanted company ownership to stay in Quebec. A US investment fund offered to buy me out...Desjardins Capital’s offer allowed the next generation to become shareholders.”

The two new managing shareholders issued a statement that said in part: “Versaprofiles has a wonderful team. We’re proud to be



*From left: Philippe Côté, Chantal Guillemette and Serge Mercier*

the exclusive provider of plastic distribution pipe for Énergir in Quebec. The company also specializes in custom made profiles in a variety of thermoplastic materials. We’re known as the Canadian leader in geothermal loop systems, thanks in part to a major contract on the Vancouver International Airport expansion in 2019, and we have other exciting projects lined up in the USA.” Versaprofiles employs 80 people at two plants in Saint-Lazare-de-Bellechasse and Sainte-Claire, Quebec. Quintessential Quebecers and Canadians, the company supplies a great deal of piping for use in maple syrup production.

The Vancouver Airport geothermal project cuts greenhouse gas emissions and saves energy while expanding the facility by 300,000 square feet. Versaprofiles supplied 841 Verticaloop single U-bend HDPE loops, each 1000 feet long with a molded, heat-fused u-bend at their midpoints.

They were installed by Alberta’s Ground Source Energy, beginning in 2019. As they were working with soft glacial till overburden, they sonic drilled with casing in each well to prevent holes from collapsing on themselves. Despite some challenges with shipping across the country, the project was completed ahead of schedule and Versaprofiles won a Project of the Year award from the Plastic Pipe Institute. Congratulations to the Versaprofiles team!

**VERSAPIPE®**  
Cost-efficient geothermal piping

# PIPE IN THE SAVINGS

**GEO THERMAL  
SYSTEMS...**

CUSTOMIZED  
DURABLE  
EASY TO USE  
CERTIFIED  
EFFICIENT



→ CONTACT US

[info@versaprofiles.com](mailto:info@versaprofiles.com) 1 877 335 7473



**VERSAFILES**  
TUBES, PROFILES, COMPLEX SOLUTIONS MADE SIMPLE



## Unique Opportunity to Purchase Geothermal Energy Systems

An opportunity exists to acquire three geothermal heating and cooling systems (the “Geothermal Systems”) managed by Urbancorp Renewable Power Inc. (“URPI”) and owned by entities in the Urbancorp Group of Companies. The Geothermal Systems are located at three condominiums in close proximity to each other in downtown Toronto, Ontario. URPI has long-term supply agreements in place with each of the condominium corporations. If you are interested in this opportunity, please contact Eli Brenner of KSV Restructuring Inc., the court-appointed receiver and manager of URPI at 416.573.8572 or by email at [ebrenner@ksvadvisory.com](mailto:ebrenner@ksvadvisory.com).



# Thank you to our Sustaining Partners !

The Ontario Geothermal Association would like to say thank you to five companies who have stepped up and become Sustaining Partners to the organization. The companies are Aecon, GeoSource Energy, Subterra Renewables, Versaprofiles, and Waterfurnace/Eden Energy.

Some of these firms are also providing special contributions to our research and advocacy efforts.

A sustaining partner receives exposure in our In the Loop Newsletter, Down to Earth Bulletin, on our web site, social media sites and in our email marketing.

If your organization is interested in our Sustaining Partner Program please visit our web site at [ontariogeothermal.ca/spp](http://ontariogeothermal.ca/spp) or contact Paul Frith at 647-287-5554 or Jeff Hunter at 519-854-8986.

Thanks again to our awesome partners!

**AECON**



## 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](mailto: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](mailto:sales@hrai.ca).

## New & Current Members

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

## Follow us on Social Media at:

- OGA LinkedIn: <https://tinyurl.com/wdjjg7k>
- OGA Facebook: <https://www.facebook.com/OGACanada>
- OGA Instagram: <https://www.instagram.com/OGACanada/>
- OGA Twitter: <https://twitter.com/OGACanada>
- OGA YouTube: <https://tinyurl.com/rbfu7gk>

## More Information

Contact [office@ontariogeothermal.ca](mailto:office@ontariogeothermal.ca) for more information on the Ontario Geothermal Association.

## Association Partner

