Never Give In!
Doug Dougherty, GEO President and CEO

The title quote from Winston Churchill is appropriate in GEO’s battle to attain the same tax credit treatment for geothermal heat pumps (GHPs) as solar and wind.

The problem started in late-2015 when Congress extended commercial and residential tax credits for solar and wind installations, but left out a host of other qualifying clean energy options, including GHPs. GEO was assured by congressional leadership that the “oversight” would be corrected quickly, and we worked hard to make it happen. But 2016 slipped away under the weight of election year politics, and we saw our tax credits expire at the end last year.

With our many allies in other “orphaned” clean energy industries, our plea has become even more urgent as we see sales declines of 30% and more, and reports of layoffs across the GHP industry.

We’ve pursued the promised fix to tax credit equity in good faith, and expect Congress to make good on their word. Our message has been loud and clear, that Congress should not be picking winners and losers in clean energy markets by playing favorites with tax credits.

GEO was naturally disappointed that the recent Omnibus funding bill for the remainder of fiscal year 2017 passed Congress with no tax policy provisions. GEO lobbied hard for inclusion of the tax language contained in H.R. 1090 that would provide tax parity for GHPs through 2021.

Remember that H.R. 1090 is still in play, with its primary sponsor Rep. Tom Reed (R-NY) standing staunchly behind its provisions with support from 72 cosponsors gathered by GEO and its allies across the country and in Washington, DC. That success is in no small part due to the patience and diligence of GEO members who have followed up on our Action Alerts to contact their local representatives.

CONTACT YOUR REPRESENTATIVE IN SUPPORT OF H.R. 1090
We need your help. You can quickly find contact information for your local representative by entering your Zip Code here. To find out if your representative is already a cosponsor of the bill, click here. If not, ask him or her to do so right away. Even better, extend an invitation to visit one of your geothermal job sites. GEO offers instructions and support materials for job site visits here.
in support of H.R. 1090. Many of our supporters have invited local congressional representatives to visit geothermal job sites, the most effective way to convince them of GHPs’ value to consumers, the economy and the environment (see examples on pgs. 3-6).

GEO remains confident that our continued efforts will persuade even more representatives to sign on to the bill. We will continue our work toward the goal of tax credit parity into the fall, promoting H.R. 1090 for inclusion in appropriate legislation before the end of the year.

Even though GEO and the industry have been focused on the federal tax credits, we continue our work with the International Ground Source Heat Pump Association and several state and regional geothermal associations on compelling and difficult issues of regulation, taxation and utility acceptance and promotion of GHPs. Thanks for your continuing support of GEO’s efforts to grow our industry. (GEO)

GEO Video Highlights Tax Credits and Jobs
April 21 – The Geothermal Exchange Organization (GEO) released a brief video presentation that graphically describes the need for renewed federal tax credits for geothermal heat pumps and the thousands of jobs that they will help protect.

Geothermal heat pumps are a clean, renewable energy technology for heating and cooling homes and buildings. Federal credits for residential and commercial geothermal heat pump installations have been in effect since early 2009, until they expired at the end of 2016.

Yet prior to their expiration, Congress extended similar tax credits for solar and wind, but not for geothermal heat pumps and other orphaned technologies like fuel cells, microturbines, small wind and combined heat and power.

“Congress’ failure to right this wrong is having real consequences,” says GEO President and CEO Doug Dougherty in the video. “Unfortunately, geothermal heat pump manufacturers project sales declines of 30 to 40% in 2017 and beyond. “

As he explains in the video, “Geothermal heat pumps use the sun’s energy stored in the ground to provide highly efficient and exceptionally comfortable home heating and cooling. They are extremely reliable and they work day or night, regardless of the weather. Homeowners who install a geothermal heat pump can drastically lower their eco-footprint, as well as reducing their monthly utility bills.”

“On top of that,” Dougherty continues, “geothermal employs a lot of people.” He describes the long and complex supply chain from product design through manufacture, to system design and engineering to installation and maintenance of geothermal heat pump systems in homes and buildings.

“In fact, if you add up all of the people involved in the supply chain of a geothermal system, you’ll get 70,000 unique jobs,” he concludes, “With so many jobs on the line, Congress shouldn’t be picking winners and losers.” Watch the video on GEO’s YouTube Channel here.
April 21 - Congressman Trey Hollingsworth (R- IN, 9th District) visited the Geo-Flo plant in Bedford, Indiana. Geo-Flo Products Corp. is a leading manufacturer of circulating pump modules for residential and commercial geothermal applications, as well as a complete supplier of pipe, fittings, and accessories.

Discussions included the state of the geothermal heat pump industry, as well as Geo-Flo's encouragement to support H.R. Bill 1090, introduced early this year by Rep. Tom Reed (R-NY). The legislation would extend the tax credit for investments for geothermal heat pumps (GHPs) through Jan. 1, 2022. The bill includes geothermal technology and other renewables left out of the tax credit extension that included solar installations. There are currently 67 cosponsors of H.R. 1090.

Geo-Flo President Tom Wyer gave a brief presentation, followed by a factory tour. Part of the presentation included a history of Geo-Flo, which began production in 1988. Wyer provided some background on the geothermal industry, and statistics to help provide Hollingsworth and his staff a better understanding of how the GHP industry compares to the overall HVAC industry and U.S. manufacturing in general.

It’s estimated that around 2,000 people are directly or indirectly employed as a result of the geothermal heat pump industry, just in Indiana. “These are good manufacturing jobs, skilled HVAC installation technicians, and heavy equipment operators; jobs that cannot be exported,” Wyer said.

According to Wyer, GHP technology and the industry have grown steadily for most of the past 30 years until around 2009-2010, when the effects of the “Great Recession” started affecting the industry. In 2008, under President George W. Bush (who has geothermal in his Texas ranch home), tax credits were established that provided support to energy efficient energy technologies, including GHPs.

“Unfortunately, the credits coincided with the ‘Great Recession’, limiting industry growth,” he said. “When the omnibus bill passed by Congress in December 2015 extended tax credits for the solar industry, but left out geothermal, solar technology received an unfair advantage from a tax standpoint. H.R. 1090 provides tax equity.”
During the factory tour, a number of good discussions relating to Geo-Flo manufacturing and geothermal technology provided Hollingsworth and his staff with additional details. Geo-Flo guests watched as CNC equipment machined brass fittings and adapters from bar stock that Geo-Flo brings in exclusively from U.S. mills.

“We very much enjoyed Representative Hollingsworth’s visit, and appreciate his time. Awareness of how the geothermal heat pump industry impacts jobs, energy, and the environment is good for business,” Wyer concluded. “If you haven’t already contacted your representative, please ask for his or her support to put geothermal on parity with other renewables.” For more information about Geo-Flo, contact Jeff Hammond at jhammond@geo-flo.com. (Geo-Flo Products Corp.)

Georgia Geo Housing Community
April 22 – Pinewood Forrest development highlighted construction of its first 50 homes in Fayetteville, GA. Each will be served by geothermal heating and cooling, which offers a 40-70% reduction in energy costs and no outside units to add noise to the immediate environment. The developer is focused on creating a community that will produce more energy than it uses.

There will ultimately be 700 homes, along with 600 apartment flats, located within the 234-acre master planned development, which will also feature a unique mix of retail, office and other commercial space. The housing site is adjacent to Pinewood Atlanta Studios.

The first group of residences released at the Pinewood Forrest features floorplans designed by nationally renowned planner Lew Oliver. They range from 1,214 to 3,880 sq. ft., priced from $349,900 to $1+ million.

All homes meet rigorous components of the program, which include the geothermal heat pump systems, total zip sheeting insulation, whole house mechanical ventilation, and other criteria designed to improve indoor air quality and reduce both energy and water consumption. Click here for more information. Read articles about Pinewood Forrest here, and here. (The Citizen, and Globe News Wire)
June 11 – U.S. Representative Steve Russell (R-OK, Fifth District) visited Gulfport Energy Corp.’s $35 million headquarters in Oklahoma City, where he learned firsthand about its geothermal heat pump (GHP) system. Hosted by Gulfport Energy, Oklahoma Gas & Electric (OG&E) and GHP design and construction firm Comfortworks, Inc., the group also discussed H.R. 1090, legislation that would restore federal commercial and residential tax credits for GHPs and other clean energy alternatives.

Completed in late-2016, the Gulfport Headquarters building boasts cutting-edge energy efficiency technologies, including its $3.5 million GHP system with 131 heat pumps and 168 ground heat exchangers drilled 500-ft. deep, which provide 430 cooling tons and more than 2 million annual kilowatt-hour savings. Other efficiency measures include LED lighting and a control system that lowers and raises shades as the sun moves around the building. OG&E recently presented Gulfport officials with a $237,000 rebate check for reducing power use through the use of those technologies.

"The energy efficiency technology available to commercial builders is advancing exponentially and delivering significant savings for utility customers taking advantage of it in new construction or remodels," said OG&E Commercial Energy Efficiency Manager Forrest McGee. "The Gulfport building is the most energy efficient facility that OG&E has provided incentives for that is over two stories high. "Its geothermal system and other efficiency measures drive savings while ensuring comfort and optimal work conditions. If not for the expertise and partnership of Comfortworks and Van Hoose Construction, the project may not have achieved the same level of efficiency."

Following Rep. Russell’s site visit, Comfortworks Chairman Dan Ellis said, “We are truly fortunate to have leaders of principle representing us. We are hopeful that the Congressman will join other members of the Oklahoma delegation and many other conservative Republicans in cosponsoring H.R. 1090. Our goal with this bill is to send a strong signal to leadership so that we are not easily overlooked the next time tax legislation is taken up as were late one night in December of 2015. We feel this excellent ‘Made in the USA’ technology deserves to be on a level playing field with solar and wind, as it was until our tax credits expired at the end of 2016.” For more information about Gulfport Energy, click here. For more about OG&E, click here. And for more about Comfortworks, Inc., click here. (GEO)

April 18 – Rep. Fred Upton (R-MI, Sixth District) visited the geothermal heat pump (GHP) job at Midwest Energy Cooperative’s new office facility under construction in Cassopolis, MI. Several GHP industry representatives informed the congressman about the benefits of GHPs for heating and cooling, and urged his cosponsorship of H.R. 1090, a bill that would reinstate and extend federal tax credits for both residential and commercial geothermal installations. The credits expired at the end of 2016. Rep. Upton saw first-hand the work being done on the building’s geothermal system, which has multiple units installed, 148 boreholes 350’ deep, and two 8” mains entering the building. (Al Waller, WaterFurnace International)

Michigan Farmer Uses Geo for Greenhouses

May 4 – The News Review reported, “Using geothermal energy requires harnessing the natural heat generated and stored in the ground. At the Coveyou Scenic Farm Market in Petoskey, MI, a geothermal field provides all of the heat necessary for a greenhouse full of produce.” The greenhouse has been operating on geothermal energy through the last three winters.

Scenic Farm Market owner David Coveyou says geothermal’s “claim to fame” is its transfer of four to five times the amount of heat energy as it consumes in electricity. “It would be impractical to grow produce in the winter or all the vegetable transplants that we grow now if it weren’t for this geothermal technology,” Coveyou said. “It would be so cost prohibitive that it wouldn’t make financial sense. That’s what got us here.”

Coveyou Scenic Farm Market has been recognized by the Governor’s Energy Excellence Awards. According to the article, the farm caught the attention of state officials when Coveyou expanded the geothermal energy field to include the farm’s walk-in coolers and reach-in coolers. Coveyou plans to open his geothermally heated greenhouse to the public this summer, so they can see where and how his produce is grown, and learn more about his geothermal heat pump energy system. Read the complete article here. (News Review)
EHPA Rallies for “DecarbHeat” with Heat Pumps Across Europe

May 11 – The first day of the DecarbHeat Forum taking place in Brussels gathered more than 220 participants, including major players of the heating and cooling industry from all around Europe and relevant policymakers at the European, national, regional and local levels.

Martin Forsén, President of the European Heat Pump Association (EHPA), said, “We would like policy makers to see the determination of the industry to decarbonize the heating and cooling sector. The heat pump industry is growing today, but we need policies to speed up and deepen the process. Heating and cooling needs to become the new political priority.”

Forsén also serves on the Board of Directors of the U.S. geothermal industry trade association, GEO – The Geothermal Exchange Organization.

In the ambitious post-Paris COP21 world, the Decarb Heat Forum stands out as the first gathering of cross-sectoral companies, associations and institutions that believe in bridging the gap and connecting the heating/cooling and electricity sectors in the move towards zero CO2 emissions by 2050.

“The modernization and integration of renewable energies must go hand in hand. Heating and cooling must be at the center of our attention. For this, communication is key.” said Dominique Ristori, Director General for Energy at the European Commission.

The first day of the conference focused on policies to achieve decarbonization of cities and industry. A “DecarbHeat Ceremony” provided the opportunity for heat pump industry representatives and other major stakeholders to formally sign an Industry Pledge and a Declaration of Support. By signing these documents, they showed their willingness to make the vision of a 100% decarbonized heating and cooling a reality across Europe.

His Royal Highness the Prince Laurent of Belgium supports the initiative and attended the ceremony, which was followed by the Heat Pump City of the Year Awards, presented by Céline Frémault, Minister of Energy and Environment for the Brussels Capital Region. The City of Vienna won the prize for Heat Pump Deployment in New Buildings. Other winners included the city of Berlin, Germany for Best Refurbishment Project, and the City of Trondheim, Norway for Best Visualization of Heat Pumps.

“A healthy and sustainable future is also the wish of the vast majority of European citizens. So as a representative of the people, I feel it to be my duty to give my full personal support to the DecarbHeat vision and to your initiative,” said Frémault.

The forum included insights from several respected institutions, including the International Renewable Energy Agency (IRENA), global corporate leaders like Harry Verhaar (Philips), thought leaders on policy, like European Parliament Member Claude Turmes, and on science from representatives of the Fraunhofer Institute for Solar Energy. (EHPA)
Yale Renewable Thermal Alliance

April 26 - The Renewable Thermal Alliance (RTA), a new project spearheaded by Yale University, is coordinating activities to harmonize and share best practices in the regional development of markets for renewable heating and cooling technologies across the Northeast.

Initiated by Yale University, New York State Energy Research and Development Authority (NYSERDA) and the Connecticut Green Bank, the RTA is looking to expand this initiative to include regional governments, industry associations, investors and other interested organizations.

Recent studies in Connecticut, New York, and Rhode Island indicate that more than 40 percent of the energy demand of residential and commercial buildings is used for heating and cooling purposes. As a result, heating and cooling is both a major source of greenhouse gas emissions and, through the installation of renewable technologies like ground and air source heat pumps, is an important facet of any mitigation strategy.

The findings of the three states indicate a total market for heating and cooling of around 1,700 trillion BTUs in New England and New York together, representing a large investment opportunity for renewable heating and cooling.

"Renewable thermal technologies can play a central role in heating and cooling and are gaining recognition as a solution to the reduction of greenhouse gas emissions across the region, and should no longer be overlooked," says Helle Gronli, an associate research scientist at the Yale School of Forestry & Environmental Studies who is directing the Renewable Thermal Alliance. "By organizing a multi-state effort we hope to not just tap into this market potential, but amplify it by addressing shared challenges of an immature market."

States face a relatively universal set of challenges in building renewable thermal markets, and the proposed solutions all point the same direction. Greater regional synchronization thus offers a number of benefits that wouldn't be realized by states working on their own. These include:

- Reduced barriers to entry for installers;
- A forum for sharing best practices in building and sustaining this market;
- Increased awareness of new technologies among stakeholders; and
- Decreased installation costs through greater competition as well as harmonization of permitting and installation processes.

Importantly, the Renewable Thermal Alliance has also partnered with the Connecticut Green Bank to establish a sound financial foundation and stimulate demand for this nascent market. "In the renewable energy world, the high upfront cost of new technology is regularly a barrier to its widespread adoption," says Bryan Garcia, President and CEO of the Green Bank. "Through the Renewable Thermal Alliance, we hope to attract more private investment in the economies of the Northeast to deploy more of these important renewable heating and cooling technologies."

Initiated well over a year ago, the alliance has already enlisted the cooperation of over 100 individual members from nearly 75 different organizations, from policy makers to installers. As it develops, the alliance will cultivate a long-term viable market for renewable thermal energy for heating and cooling. To that end, leveraging private capital, securitization, and the potential for issuing Green Bonds is essential for bringing deployment to scale.
John B. Rhodes, President and CEO, NYSERDA said, "Renewable heating and cooling technology is critical to Gov. Cuomo's nation-leading energy strategy. We recently developed several proposals such as offering a $15 million rebate program for the installation of ground-source heat pumps, working with local communities to increase market awareness and confidence in the technology, and partnering with the New York Power Authority to get geothermal installed on large college campuses, all of which will accelerate the use of renewable heating and cooling technologies in New York State."

Members of the Alliance will be participating in a webinar on market strategies for renewable technologies in New England on April 27 at 12 pm EST. Register today to hear leading experts share their thoughts on market strategies to bring renewable heating and cooling to scale. For more information about joining the Alliance, contact Helle Gronli at helle.gronli@yale.edu. (Yale School of Forestry & Environmental Studies)

Policymakers Guide to GHPs

The National Renewable Energy Laboratory (NREL) has produced a Policymakers’ Guidebook for Geothermal Heating and Cooling Technologies, which outlines fives steps for implementing geothermal policy and provides links to helpful resources. Developing policy that reduces barriers and results in market deployment will lead to greater implementation of geothermal heating and cooling technologies such as ground source heat pumps and direct-use geothermal applications.

**Step 1: Assess the Local Industry and Resource Potential for Geothermal Heating and Cooling**
Increasing technology deployment requires a baseline level of knowledge about the industry and recent market trends in your locality. [Learn more](#).

**Step 2: Identify Challenges to Local Development of Geothermal Heating and Cooling**
Identifying the specific barriers associated with geothermal heating and cooling technologies in your area will help you recognize the point in development where policies are likely to be the most effective. [Learn more](#).

**Step 3: Evaluate Current Policies for Geothermal Heating and Cooling**
A coordinated plan that addresses current policy gaps and leverages existing state and federal policy will enhance your ability to develop effective new policy. [Learn more](#).

**Step 4: Consider Policy Options for Geothermal Heating and Cooling**
New or expanded policy provisions can enhance geothermal heating and cooling technology deployment. See the [types of policy options](#) you can consider.

**Step 5: Implement Policies for Geothermal Heating and Cooling**
Choosing and implementing the right policies for your area will help it achieve geothermal heating and cooling technology goals. The policies you design should address the most prominent geothermal barriers in your area. [Learn more](#). Download a [printable brochure](#) of this guidebook. (NREL)
Michigan Capitol Could Include Geo

May 1 – Following a renovation of the 138-year old Michigan State Capitol building, the state is planning a 2-yr., $70 million upgrade to its infrastructure, including a new geothermal system for heating and cooling. With adequate legislative funding, excavation and drilling could start in August. Geothermal comes with added clean energy benefits and lower energy bills long-term. With the geothermal system and other energy efficiency upgrades, the goal is to cut the Capitol’s $800,000 annual utility bill in half.

When the capitol geothermal system is completed, it would be the third such building in the nation equipped with geothermal, following Oklahoma and Colorado.

According to Midwest Energy News, “The planned closed-loop system involves drilling about 200 wells roughly 450 feet below the surface of where state lawmakers currently park on the west side of the building. The east-side lawn includes statues and the building’s main staircase where public demonstrations often take place.”

“The geothermal portion, while carrying a higher upfront cost than a traditional heating and cooling system, is expected to have a return on investment in eight to 10 years. It is being overseen by the Michigan State Capitol Commission, a task force created in 2014 to help guide multiple restoration projects, which is optimistic the funding will be approved.... The Legislature may approve a direct appropriation to pay for the infrastructure project, or the state could use its bonding authority to pay for it over time.” Read the article here. (Midwestern Energy News)

Skidmore College Heats and Cools with Geothermal

April 21 – According to an article in Saratoga Today, “Last year, another large geothermal installation was completed on the Skidmore College campus after Facilities Services crews had ripped up a portion of the Palamountain parking lot, in preparation for construction of a new Center for Integrated Sciences.

An “enthusiastic promoter of geothermal projects,” Assistant Director of Facilities Services Paul Lundberg says that using “closed-loop” networks of pipes to circulate water for indoor climate control, Skidmore’s “...goal is get ‘the best bang for your buck’ in terms of energy consumption. The article says, “Geothermal energy heats and cools nearly 40 percent of the square foot-age inside all of Skidmore’s buildings. That includes the Arthur Zankel Music Center, Tang Teaching Museum, the Northwoods and Sussman student apartments, and numerous other structures....”

The New York Geothermal Energy Organization (NY-GEO) convened its “Geopalooza” conference at Skidmore In 2015. “In 2012, a national academic association recognized Skidmore with an award for the operation of its geothermal energy system.” Read the article here. (Saratoga Today)
Geothermal Energy for Healthcare Facilities
According to Boulder Associates Architects website: “A little extra investment up-front could provide significant environmental—and financial—benefits. Heat pumps, especially geothermal heat pumps (GHPs), have emerged as an efficient technology to provide thermal comfort while reducing energy consumption and pollution compared to other systems.

“While GHPs cost more to construct than most conventional air-conditioning and gas-fired furnace systems, they consume 25%-50% less energy, paying back their extra cost within just a few years. Because GHPs themselves do not consume fossil fuels, they do not directly contribute greenhouse gasses to the atmosphere. In fact, if some of the savings from reduced energy usage were used to purchase electricity from wind or solar sources, heating and cooling of the building could be carbon-neutral!

“Great River Medical Center’s Greenfield Replacement Hospital in Burlington, Iowa, built in 2000, uses a lake-coupled geothermal system to save nearly $1 million per year in fuel costs. A replacement hospital for Sherman Health, outside of Chicago, is currently under construction and will also feature a 15-acre lake-coupled system. One benefit of this system is that the pipe loops can be filled with air and will float to the lake surface for easy maintenance. Homelake Veterans’ Center in southern Colorado is currently installing a horizontal closed-loop system, which will serve 23 existing residential duplex cottages built between 1914 and 1939.

“While a GHP system can be constructed nearly anywhere, understand that local geology, hydrology and land availability will influence the type of system best suited for a particular site and its effectiveness. GHP technology is well-developed, widely-available, and applicable to many new construction projects and as a retrofit to many existing facilities. If your medical center is looking to save money and reduce environmental impacts, GHP is worth considering.” Read the entire website posting here. (Boulder Associates Architects)

Geo Interest Spans All Ages
April 24 – An article by Samantha Sine in the Air-Conditioning, Heating and Refrigeration News (ACHR – The News), discusses the interest of various ages in renewable energy options, expressed on Earth Day. “While some plant trees, recycle, or clean parks, the HVACR industry touts the potency of geothermal heating and cooling,” she said. Since, geothermal heat pumps (GHPs) are widely recognized as a renewable energy source, “When consumers seek renewable comfort solutions, geothermal is often contractors’ first choice.”

“Millennials are known to be constantly connected to the internet, which has earned them the moniker, ‘the net generation.’ Therefore, millennials are inclined to conduct extensive research prior to making an investment or purchase,” says the article. “Millennials have overtaken and are now quite possibly the largest group of consumers in the nation,” said Tim Wright, national sales manager,
Enertech Global LLC. “They are also the most tech-savvy within the generations. Even if they’re carrying debt, they still tend to look at all of their options when it comes to technologies. While return on investment does come into play, they’re also looking at how they are impacting the environment.”

“Tim Litton, director of marketing communications, WaterFurnace Intl. Inc., said geothermal is a perfect fit for millennials. “Millennials tend to be more willing to pay for sustainability, are better educated, and tech-loving – which is pretty much the ideal geothermal customer,” Litton said. “We’re working to reach this population early, so when they begin looking for ways to condition their homes, they’re already aware of the benefits geothermal heat pumps provide.”

The article points out that more established and financially secure baby boomers make up the largest percentage of geothermal customers. Steve Smith, president and CEO, Enertech Global LLC, noted that the majority of Enertech’s geothermal customers are baby boomers. “The majority of our customers fall into the 55-64 age range,” said Smith. “We believe this is evolving quickly, though, largely due to millennials’ obsession with research. Our kids are telling us stuff they are finding in their research, and there is a push and pull there with that information transfer.” He also said that baby boomers are environmentally concerned and are focused on the return on investment offered by geothermal. Read the article here. (ACHR – The News)

Accredited Installer Workshop
June 21-23, 2017 • Stillwater, Oklahoma

The International Ground Source Heat Pump Association will hold their next Accredited Installer Workshop in Stillwater, Oklahoma, June 21-23, 2017. Students will spend two days learning from instructors who have field experience installing systems. At the end of the course, students will take the NATE exam to become a NATE certified installer.

Why Should You Attend? Becoming an IGSHPA Accredited Installer enables you to enter new markets and offer customers a low-maintenance, energy saving, and environmentally friendly alternative for their space conditioning needs. IGSHPA developed the training and accreditation testing with North American Technician Excellence. With more than twenty-five years of experience teaching these workshops, accrediting thousands of installers, and setting the industry standard, IGSHPA has written the training manuals and pioneered training in GHP installation

Topics Design and Material Options | System Layout | Pipe Joining Techniques | Trenching and Drilling Processes | Air and Debris Purging | Pressure Drop Calculations | Pump and Fluid Selection | Hands-on Fusion of HDPE Pipe

To enroll online, visit IGSHPA’s secure payment site Marketplace.
Utilities Warm Up to Geo
April 26 – According to an article in Politico New York Energy: “Spurred by state policymakers and new business opportunities, utilities are opening up to geothermal technologies as a benefit for customers as well as shareholders.” The story quotes Donovan Gordon, who heads up the New York State Energy Research and Development Authority's (NYSERDA) renewable heating and cooling efforts: “They’re all very interested in ground source heat pumps... because they see the value it brings to the grid, to their businesses.”

“These systems use heat pumps that run on electricity, which means they represent new revenues for utilities,” says the article. “The state sees geothermal as a key technology to meet its climate goals, because the energy used by buildings accounts for 32% of greenhouse gas emissions in the state.

“Environmental groups are pushing for geothermal as an alternative to switching homes from less efficient and "dirtier" fuels like propane, home heating oil or wood to natural gas. About 54% of occupied buildings in New York outside of New York City are served by natural gas from utilities, according to census estimates based on data from 2011 through 2015.

“A significant portion—34%—use propane, kerosene, home heating oil, coal or wood, according to the data. Gas utilities and state policymakers have in the past pushed to switch homes heated by these fuels to more efficient, cleaner natural gas.”

The article says that utility companies are showing interest in the benefits of geothermal, including reduced peak demand in the summer and increased electricity use in the winter. Donovan also said that gas companies could benefit from geothermal through offering low-cost heating in new service areas. Gordon said that “…one possible way for utilities to boost geothermal energy is by offering a lower rate for the electricity used by a heat pump.” (POLITICO New York Energy)

Canada’s Largest Natural Gas Utility Embarks on Geo Plan
April 18 – According to an article by Editor Jennifer Runyon in Renewable Energy World, Enbridge Gas Distribution is interested in developing geothermal heating and cooling solutions in Ontario and offering them to homeowners. Enbridge owns and operates Canada's largest natural gas distribution network, providing distribution services in Ontario, Quebec, New Brunswick and New York State.

Driving the decision is Ontario’s aggressive carbon-reduction goals and a significant heating load in the region. With much of Ontario’s heating load still met with gas, propane and oil, Enbridge says geothermal heat pumps (GHPs) are attractive for meeting consumers’ energy needs.

As a regulated company, Enbridge could “rate-base” the upfront cost of installing geothermal heat exchanging loops underground, “…spreading that cost over a much longer period than homeowners could do on their own.” If the company can put GHP costs into its rate base, it can bring them down significantly by spreading it over a 40-year time span. “Because natural gas is so much cheaper you’ve got to use every means at your disposal today to bring that cost [of geothermal] down.” Read the article here. (Renewable Energy World)
IGSHPA Training and Accreditation Opportunities

The International Ground Source Heat Pump Association offers a number of training opportunities. To learn more about each offering, please click on the titles below.

**Certified Geothermal Inspector Workshop**
- Trainers: John Turley and Cary Smith
- **Date:** May 22-23, 2017
- **Location:** Stillwater, OK
- (Learning units available for course through AIA)

**Certified GeoExchange Designer Workshop**
- Trainer: Ed Lohrenz
- **Date:** June 5-7, 2017
- **Location:** Stillwater, OK
- (Learning units available for course through AIA)

**Certified Residential Geothermal Designer Workshop**
- Trainers: Ryan Carda and Ed Lohrenz
- **Date:** June 8-9, 2017
- **Location:** Stillwater, OK

**IGSHPA Accredited Installers Workshop**
- Trainers: TBD
- **Date:** June 21-23, 2017
- **Location:** Stillwater, OK

**IGSHPA Geothermal Installer Accreditation Training - HeatSpring**
- Trainer: Ryan Carda, P.E.
- **Date:** Rolling - Begin Immediately
- **Location:** Online

**IGSHPA Certified GeoExchange Designer (CGD Plus) Accreditation - HeatSpring**
- Trainer: Ryan Carda, P.E.
- **Date:** Rolling - Begin Immediately
- **Location:** Online

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**GEO Industry News** is a publication of GEO, the Geothermal Exchange Organization, a non-profit trade association that advocates the environmental, energy efficiency and economic benefits of geothermal heat pump systems for heating and cooling of residential, commercial, and institutional buildings. For more information, visit our website: [www.GeoExchange.org](http://www.GeoExchange.org).

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