

Sign-ups cool down

New geothermal energy systems on decline for LI

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New sign-ups for geothermal energy-system rebates on Long Island have dropped steadily in the past five years as the cost and complexity of the efficient heating and cooling systems, along with some market setbacks, take a toll, officials say.

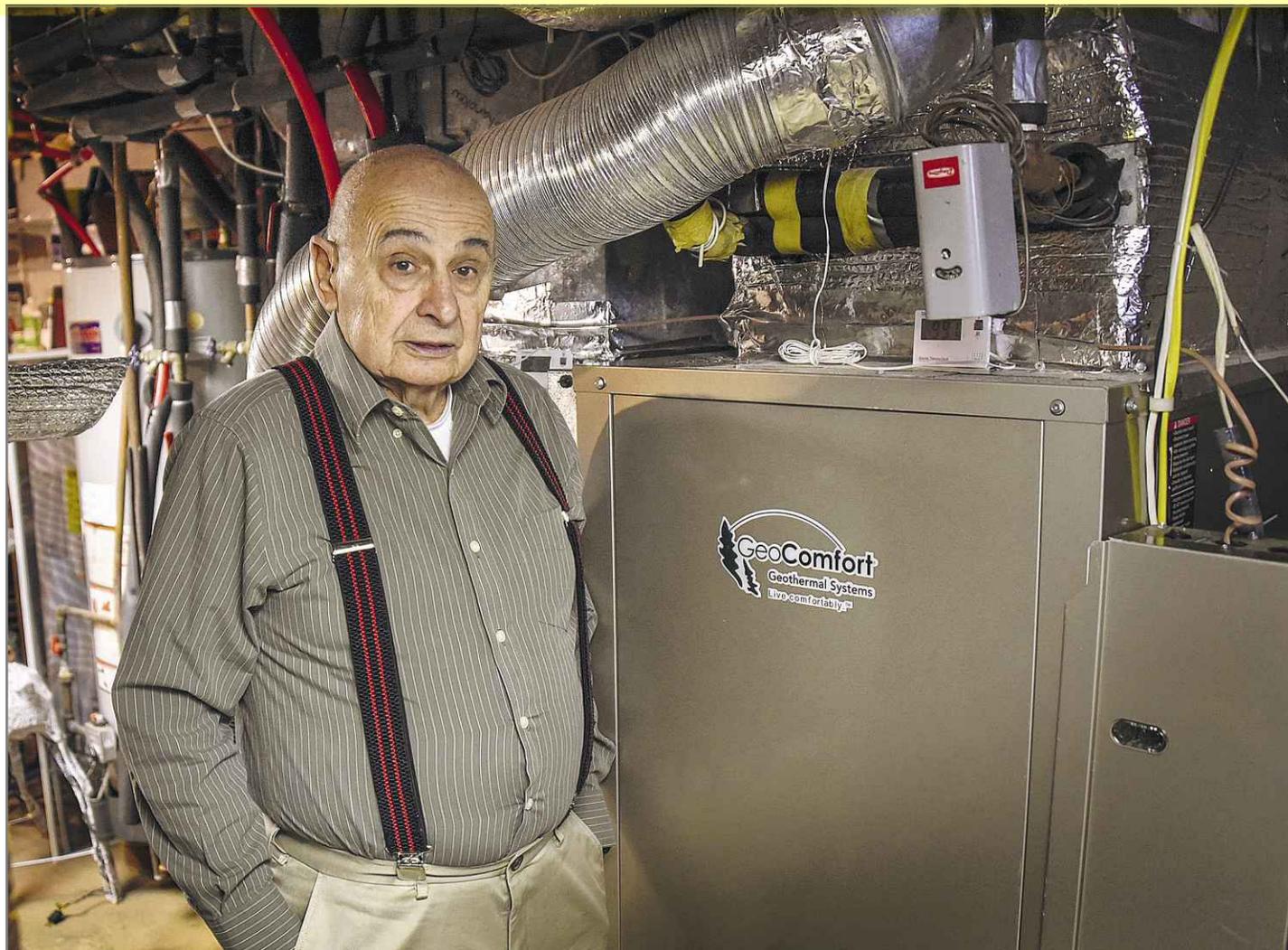
Geothermal systems use the earth's stable temperatures hundreds of feet underground to enable efficient heating and cooling equipment that replaces common oil or gas-fueled boilers. Powered by electrical pumps and condensers, the systems can be 30 percent to 50 percent more efficient than fossil-fuel based heaters or central air-conditioning systems, with no emissions.

Despite the promise of energy savings and lower emissions, geothermal system installations have lagged on Long Island behind more popular technologies such as rooftop solar systems.

Last year there were 45 different geothermal projects that received \$888,464 in rebates, according to PSEG Long Island, which administers the program under contract with the Long Island Power Authority. That figure represents the lowest level of participants in the sector since 2005, when 42 signed up; the high was 128 customers in 2008. The rebate amount and the energy saved by the systems has been increasing, however, according to PSEG, likely because of a more generous rebate and larger systems being installed.

Only about 1,238 Long Islanders have rebated geothermal energy systems, from homeowners to commercial warehouses such as the Sparkling Pointe winery operations and municipal applications such as the Sayville Public Library. By comparison, there are more than 40,000 solar power installations.

The amount of energy saved by the systems reached a peak in 2008, when 128 new customers signed up and produced 878 kilowatt-hours in savings over conventional heating and



Richard Pandolfi, president of geothermal installer PGI Corp., estimates he's installed 700 systems since he's been in the business.

BY THE NUMBERS

1,238

Number of Long Islanders who have rebated geothermal energy systems

40k

Number of solar power installations

\$30k-40k

Average cost of installations in 2,500-square-foot homes

cooling systems, PSEG estimates. The figure has dropped below that amount for the past 10 years, although it increased slightly in 2017 and 2018 over 2016, according to PSEG fig-

ures.

For average homes of about 2,500 square feet, systems can cost \$30,000 to \$40,000, but it's much more for larger homes.

"The reason you'll never get [many] hundreds or thousands of systems per year is that it's not for everybody," said Mike Voltz, vice president of renewable energy and efficiency for PSEG. "At the current price point, it's too expensive for the mass market."

The market has seen some setbacks. In 2017, Pindar Vineyards, Long Island's largest winery, dismantled and scrapped a large geothermal system it installed in its winery warehouse in favor of conventional cooling. "It just didn't work," said Erik Bilka, the winemaker, explaining that sediment from groundwater clogged system pumps. Pindar continues to use

separate geothermal systems to heat the tasting rooms for its Duck Walk and Jason's vineyards, said Pindar Damianos, a co-owner.

And the market for geothermal system installers is consolidating to about 10 local experts, according to PSEG. "It's a fairly complex business to be in and therefore you really want to have a contractor that specializes in it," said PSEG's Voltz.

The market took a major hit in 2014 when Sherman Industry went into bankruptcy, leaving more than 125 customers who'd paid some \$8 million in deposits for systems in the lurch, according to bankruptcy court filings, which accused owner Thomas Hancock Sr. and his co-defendants of violations of the Racketeer Influenced Corrupt Organization Act, among other things. Hancock and his

partners, who had previously worked on church construction, "lacked the knowledge and ability required to properly install geothermal systems," the papers alleged.

Hancock and the others, who denied wrongdoing, were not charged with any improprieties, and the bankruptcy court trustee, Marc Pergament, settled the case for \$219,000, according to court documents. Howard Kleinberg, a lawyer for Hancock, declined to comment. Pergament didn't return calls. Nassau District Attorney spokesman Brendan Brosh said the agency referred the matter to the U.S. Attorney's office. The U.S. Attorney's office did not respond to a request for comment.

Homeowners aren't hopeful of reimbursements. "I don't think there's really going to be