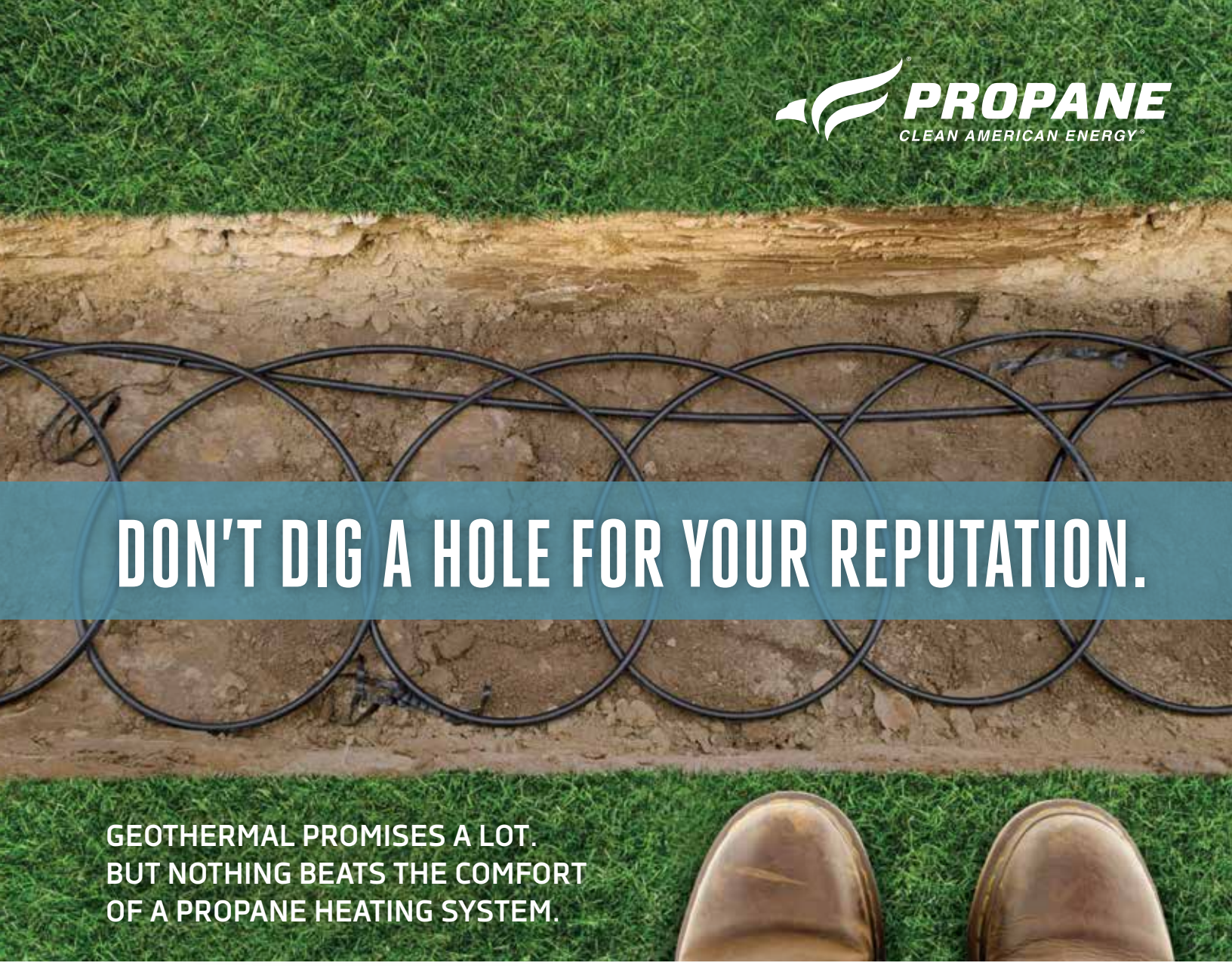

LOOK AT YOUR OPTIONS BEFORE DIGGING

The low monthly energy costs homeowners enjoy with a geothermal system can be very attractive. But homeowners don't choose a heating system for financial reasons alone. They want to keep their families warm during long, cold winter months. And the fact is, geothermal systems can't deliver the same warm, comfortable heat as a modern propane furnace. And in extreme cold, when a geothermal system's electric resistance heat kicks in, homeowners don't get to enjoy those energy savings, either. If you're the builder who recommended that geothermal system, you've just dug a big, expensive hole for your reputation. So let's look at the options.

FIRST: IS GEOTHERMAL VIABLE?

Before choosing between a propane furnace and geothermal, construction pros must first decide if geothermal is feasible for the project. Geothermal systems require wells, or "loop fields," to utilize the ground as a heat source. Space constraints are a significant issue in existing properties and urban areas. Higher heating or cooling loads may require deeper wells, more wells, or more trenches in limited spaces.

By comparison, propane furnaces are easily installed in basements, attics, even equipment closets, and other locations.

PROPANE VS. GEOTHERMAL COMFORT

The lower the temperature of heated air, the more likely occupants are to be uncomfortable — particularly when the air temperature falls below body temperature. A typical, standalone geothermal system delivers heat in the 90–120 degrees Fahrenheit range. At first glance, this appears acceptable. But remember: the air will continue cooling as it circulates through the home. What's more, geothermal systems are typically paired with an electric resistance heat system to fill in this comfort gap during extreme cold weather. When the electric heat is engaged, not only does the homeowner see a drastic increase in monthly energy costs, they also increase their carbon footprint. This negates most — or all — of the geothermal system's benefits.

Propane heating systems consistently deliver heat in the 120–140 degrees Fahrenheit range, well above the cold threshold. In addition, because the air starts circulating at a significantly higher temperature, it remains a comfortable temperature even after cooling slightly.

PROPANE VS. GEOTHERMAL COSTS

According to research by Newport Partners, LLC, geothermal does have the lowest annual energy costs of any type of heating system studied. Yet the same research shows that when you dig into geothermal's overall costs, including the payback period — the time it takes for the energy savings to equal the installation costs — it isn't the money saver it's made out to be:

- The upfront costs of geothermal are significant, the highest installation cost of any heating system studied.
- Costs include the ground source heat pump, plus digging, installing, and burying the ground loops.
- This leads to the longest payback period of any heating system — up to 15 years in some cases.
- There are no longer incentives to offset the significant initial expense of geothermal systems for homeowners.

In contrast, the research showed that a high-efficiency propane furnace was the most affordable to purchase and install of all the heating systems studied. Because propane is a clean, efficient energy source, you can count on affordable annual energy costs, as well.

PROPANE: MORE THAN JUST HOME HEATING

Here's something that will make propane even more attractive for you and for homeowners: once you've installed propane, you can use it for more than just home heating comfort. Homeowners appreciate the performance of propane for:

Water heating: Faster hot water with up to 50 percent cost savings compared with electric options.

Cooking: The joy and control of cooking with gas, just like the pros do.

Clothes drying: Faster drying with up to 20 percent less energy use.

Fireplaces: Significantly warmer and more energy efficient than electric or wood fireplaces.

CHOOSE PROPANE WITH CONFIDENCE.

There's no denying the benefits of propane. Homeowners will enjoy warm, comfortable heat, even in the coldest of winters, low upfront expenses, and affordable year-round energy costs. To learn more about high-efficiency propane furnaces before you start your next home project, visit **BuildWithPropane.com**.

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