

# SPRINGWATER

## FREQUENTLY ASKED QUESTIONS

### How much will I be reducing my home's carbon emissions?

Springwater's GeoExchange heating and cooling system, ENERGY STAR® and Net zero ready energy programs will help improve your home's direct carbon emissions by almost 75%\*.

### How much more efficient is GeoExchange technology than natural gas and what benefit does this bring to my home?

Combined, your home's GeoExchange system and Net zero ready energy program offer you heating that's 4 times more energy efficient than a typical natural gas furnace, cooling that's 1.6 times more energy efficient than a standard air conditioner, and a home that's 60%<sup>†</sup> more energy efficient than the typical house.<sup>‡</sup>

### Who is Enwave?

Enwave Energy Corporation is an award-winning Canadian district energy company that provides leading-edge heating and cooling services, with facilities in several cities across the GTA and Canada. Their tried and tested technology solutions are used in important Toronto buildings, such as ScotiaBank Arena and Sick Kids Hospital. To learn more about Enwave, please visit [enwave.com](http://enwave.com).

### Why is this community a perfect fit for this technology?

The City of Markham is pursuing their goal of achieving net zero emissions by 2050 and Mattamy's Springwater community is an ideal community to implement this technology to improve emissions and support the City's vision. Our partnership with Enwave has not only made it possible to bring our homeowners GeoExchange heating and cooling, but we were also able to work together with Enwave to balance and optimize the combined energy efficiency of the homes and GeoExchange system.

### Why is this community development unique?

Springwater will be the first community of its size in Canada pursuing Net zero ready homes featuring GeoExchange technology. Our partnership with Enwave is a prime example of the importance of collaboration for promoting a cleaner, greener future.

### What equipment is required in my home to support the GeoExchange system?

A quiet and compact ground source heat pump connected to underground components built into the Springwater community will replace both a traditional interior furnace and an exterior central air conditioning unit in your home.

### Will I still use natural gas and how will it affect my natural gas bill?

Springwater homes will not directly use natural gas for heating, which will significantly reduce your natural gas consumption. Your home will still use natural gas for hot water, fireplaces and potential appliances. This will reduce the cost of your natural gas bills and lower your exposure to fluctuations in carbon tax<sup>§</sup> as the world transitions to cleaner energy sources.

### How deep underground are the pipes buried?

The majority of the pipes that exchange thermal energy with the ground under the street are 260 to 330 metres underground, approximately three times the length of a football field.

### How will this affect my electrical bill?

Throughout the summer months, you may enjoy cost savings since cooling your home with the GeoExchange system is more energy-efficient than air conditioning. During the cooler months, your bill will likely remain consistent with what you pay through the rest of the year. Therefore, you can expect a relatively consistent electrical bill throughout the year compared to a traditional electrical bill being high in the summer and low in the winter.

### What is the fluid that runs through the pipes?

The pipes used in the GeoExchange system carry a mixture of water and food-grade glycol, a safe, non-toxic additive.

### What happens if my heat pump or GeoExchange system is not functioning correctly and needs to be repaired?

Your heat pump and GeoExchange System will be professionally managed and maintained throughout its useful life. You'll experience peace of mind knowing your heating and cooling technology is combined into a single, reliable unit.

### Is the GeoExchange Service part of the Ontario Energy Board?

The heating and cooling services and service levels being provided as well as the rates charged to the consumer in the Subdivision are not regulated by the Ontario Energy Board or any other entity.

### Is the City of Markham responsible for the GeoExchange System?

The City of Markham is not responsible for any matter relating to the District Energy System and the heating and cooling services being provided to the Subdivision.

### How many years is the Enwave GeoExchange Service Agreement for?

You will be entering into an 25 year service agreement with Enwave.

### Is GeoExchange the same as geothermal energy?

Both terms have been used to describe this technology. However, the technically correct term for this technology is GeoExchange, since geothermal energy may also refer to different categories of heat energy from the Earth's crust.

### Where else has GeoExchange technology been implemented?

The science behind GeoExchange technology is tried and tested. Over the past 15 years, GeoExchange technology has been installed and used in hospitals, universities, high-rise commercial buildings, airports and sustainable residential communities across North America.

### Is GeoExchange safe?

GeoExchange technology is considered safe, both technically and environmentally. Being that the unit is combustion-free, there is no flame, exhaust pipe, or risk of carbon monoxide, and the fluid within the system is water mixed with non-toxic, food-grade glycol.

### Will my home insurance premiums be affected?

Some insurance providers offer rebates or discounts to homeowners who have implemented energy-saving measures. You may be entitled to cost savings on your home insurance premiums depending on your provider.

### What happens during a power outage?

Similar to traditional homes, a disruption to heating or cooling will occur until electricity is restored.

### If a buried pipe is cracked, clogged or burst, how long could my home be stuck without heating or cooling?

The GeoExchange infrastructure in Springwater is built with the same type of durable pipe that is used for gas distribution, making it a highly reliable system. In the unlikely event a repair is required, you could expect a similar timeline to one associated with a comparable issue affecting a conventional natural gas line.

\*Up to 75% carbon reduction when compared to an Ontario Building Code home with a typical natural gas furnace.

<sup>†</sup>Up to 60% more energy efficient than a typical Ontario Building Code home.

<sup>‡</sup>Source of this data was provided by Enwave Energy Corporation and EQ Building Performance Inc. in collaboration with Mattamy Homes. This data is based on what management of Enwave Energy Corporation, EQ Building Performance Inc. and Mattamy Homes believe are reasonable assumptions. There can be no assurance that such projections will prove accurate and actual results could differ materially from such projections.

<sup>§</sup>Per the Government of Canada's Carbon Tax, which is subject to change.