

## Geothermal Heating

Geothermal heat pumps (GHPs) can heat, cool, and supply hot water to a home by taking advantage of the Earth's constant underground temperatures.

### How does it work?

The sun heats the Earth's surface. This heat is then transferred to water-filled underground pipes. This water then goes through a heat pump, which sends heated air into the distribution system.

### What are my options?

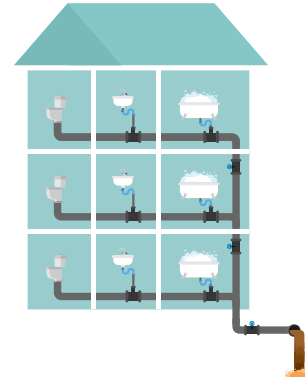
Consumers have several options to consider when selecting a GHP system. The design of a GHP system varies depending on climate, soil conditions, land availability, groundwater accessibility, and local installation costs.

### What are some Benefits?

GHP systems are more energy efficient than traditional HVAC systems, lowering your utility bill and reducing peak electricity demands. GHP systems also reduce your carbon footprint thanks to their high efficiency, all while having extremely long life spans!



Sources:  
[tinyurl.com/y6eg28zw](https://tinyurl.com/y6eg28zw)  
[tinyurl.com/y6lvovhe](https://tinyurl.com/y6lvovhe)



## Greywater system

Greywater is the term coined for water from washing machines, bathroom sinks, and showers, which can eventually be repurposed to conserve water.

### What is a greywater system?

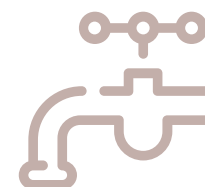
Greywater systems redirect and recycle this "repurposed" water for other purposes. There are many types of greywater systems such as rain barrels, laundry-to-landscape systems, and many others.

### What can greywater be used for?

Since greywater contains traces of dirt, food, and grease, it should not be applied directly on vegetable gardens. However, greywater can be used for toilet flushing, to irrigate lawns, ornamental gardens, or trees, or more.

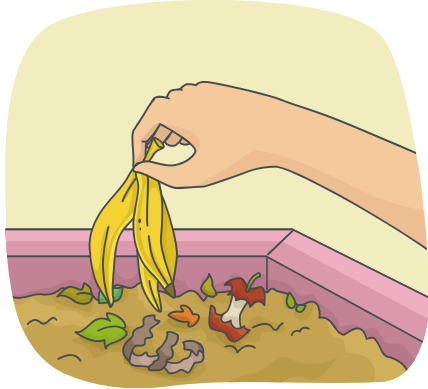
### What are some benefits of a greywater system?

Aside from the savings on your water bill, reusing greywater keeps it out of the sewer or septic system, reducing the amount of pollution in local rivers and lakes.



Sources:  
[tinyurl.com/y2kcsffk](https://tinyurl.com/y2kcsffk)  
[tinyurl.com/y3n2jq7w](https://tinyurl.com/y3n2jq7w)

# Sustainability Basics



## Composting

Composting is the process of recycling various organic materials that would otherwise be regarded as waste products.

### How does it work?

Organic matter works to break down into nutrients to be absorbed by plants. Composting is a way of aiding in this process by including the right ingredients in the right proportions under optimal conditions

### What can I compost?

To maintain a healthy compost pile, it is important to maintain a higher amount of carbon than nitrogen. Carbon-rich matter can include branches, dried leaves, peels, coffee grounds, eggs, and more. Whereas, nitrogen-rich matter can include manure, food scraps, lawn clippings, and more.

### Why compost?

Compost can be used as a garden supplement to promote plant growth and soil health, all while reducing the need for chemical fertilizers and pesticides. It also can save time and money by reducing your garbage bills.



Sources:  
[tinyurl.com/y3rqlogr](https://tinyurl.com/y3rqlogr)  
[tinyurl.com/y6sw6bgk](https://tinyurl.com/y6sw6bgk)



## Gardening

Starting a flower or vegetable garden is both fun and rewarding. Gardening can prevent soil erosion, replenish nutrients in the soil, support wildlife, and reduce your carbon footprint.

### How do I start?

First, you must think about what exactly you want to plant? If you choose to plant vegetables, fruit, or herbs, think about what your family would be willing to eat and what grows best in your climate zone. If you choose flowers, decide whether you want annuals or perennials.

### What next?

Once you decide what to plant, it is important to plan your garden beds and location. Almost all vegetables and flowers need 6-8 hours of full sun each day. Make sure to also test and prepare the soil, followed by planting your seeds or transplant.

### How do I maintain a garden?

To help your garden reach its full potential, you'll need to water the area, pull weeds, add additional fertilizer, and get rid of dead/dying vegetation. It may be necessary to support tall plants with a trellis, stake, or a tepee.



Sources:  
[tinyurl.com/y5lbal75](https://tinyurl.com/y5lbal75)  
[tinyurl.com/y6tsqqp4](https://tinyurl.com/y6tsqqp4)