

## **Key Concepts**

- ⇒ No molecules are physically exchanged between the geothermal heat pump system and the ground or the outside environment because the pipe is an isolated system, a closed loop.
- $\Rightarrow$  Earth remains at a constant temperature (~50° F) and acts as an energy reservoir.
- $\Rightarrow$  The physical pump mechanism at Carleton will be located under the new science building. This electrical work allows for circulation of the water in the pipes.
- ⇒ This allows Carleton to reduce our electricity usage in the summer and natural gas use for heating in the winter - saving money and reducing our dependence on alternative fuels.

Want to learn more about the physics of geothermal energy?

https://apps.carleton.edu/geothermal/



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