

- **The Student Sustainability Committee (SSC)** provided **\$375,000** of total funding in Fall 2018 and Spring 2019 for the geothermal exchange system at the CIF.
- The CIF geothermal system is the largest geothermal exchange system at the university. It provides **twice** as much heating and/or cooling as the latest geothermal installation on campus.
- The CIF system utilizes **40 vertical borehole exchange loops** in the adjacent Bardeen Quadrangle and has enough capacity to supply the thermal energy needed for approximately **30 American homes**. Each of these boreholes is **450 feet deep!**
- The borehole exchange loops draw heat from the building in the summer and store it underground to be used later in the winter. By including the geothermal exchange system at the CIF, **annual energy consumption is reduced by 58%** compared to similar buildings with conventional heating and cooling systems.
- The energy use avoided by running the geothermal exchange system provides **a cost savings of \$45,000 annually, or \$1.35M over the operational lifespan of the system**, which is between 30–50 years.
- Geothermal energy is **a clean, renewable, low carbon thermal energy source** needed for achieving the Illinois Climate Action Plan (iCAP). Geothermal energy systems also add significant **resiliency** to energy management planning because of the constant thermal energy available when other energy sources may be unavailable or hindered by market-demands, extreme weather, or longer-termed impacts of climate change.

