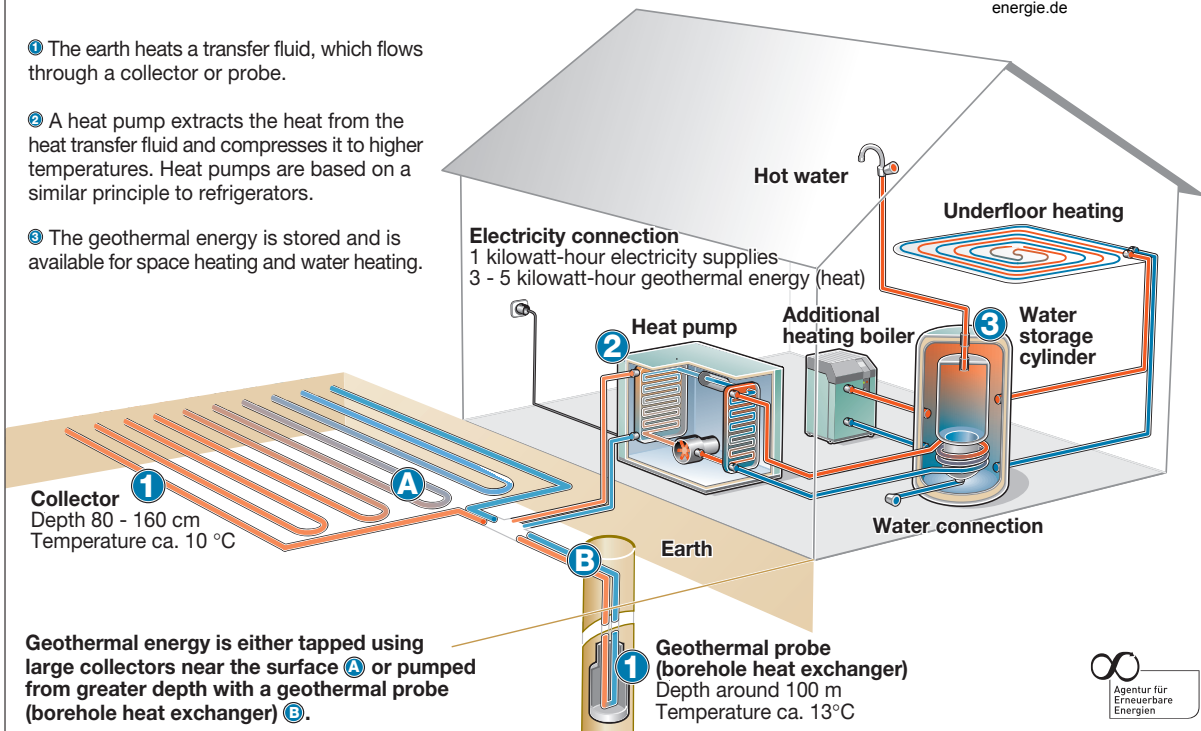


# Heat from the earth: How to heat with near-surface geothermal energy

<http://www.unendlich-viel-energie.de>

- 1 The earth heats a transfer fluid, which flows through a collector or probe.
- 2 A heat pump extracts the heat from the heat transfer fluid and compresses it to higher temperatures. Heat pumps are based on a similar principle to refrigerators.
- 3 The geothermal energy is stored and is available for space heating and water heating.



Geothermal energy is either tapped using large collectors near the surface **A** or pumped from greater depth with a geothermal probe (borehole heat exchanger) **B**.