Open loop heat pump efficiencies, maintenance and impact

Efficiencies
Heat pumps give out more energy (heat) than they use (electricity), sometimes much more. If a heat pump has a ‘coefficient of performance’ (CoP) of four that means at a given point in time it is generating four units of heat energy for every unit of electrical energy used.

Maintenance
Heat pump systems typically come with a 10-year warranty. You can expect them to operate for 20 years or more, however they do require regular scheduled maintenance. A yearly check by you and a more detailed check by FWT every 3-5 years should be sufficient.

Local impact
Borehole based heat pump installations are generally unobtrusive and extremely quiet in operation. Usually, the only system noise is from the small circulation pump, which, if audible at all, should be no louder than a modern central heating pump. The only visible sign of the borehole will be a manhole chamber. Usually the heat pump will be installed in a plant room, so that it is out of sight as well. As with all abstraction boreholes the system needs to be designed so it doesn’t impact the levels of water in the underlying aquifer and any abstraction over 20m³ per day requires an abstraction license.