Easy to handle, efficient and easy on the environment
Heat pumps are easy to operate and are fully automatic. The intelligent control system ensures that no more heat is generated than is needed to heat the building. As the heat pump runs on electricity, there is no need for a flue gas system and no CO₂ emissions are created at the installation site.

Regenerative heat is sustainable
Heat pumps absorb heat at a low temperature level (e.g. 10°C) and then release it as useful heat at a higher temperature (e.g. 50°C). Geothermal energy, which is harnessed through deep drilling, is often used as a heat source. River or lake water can also be used as a heat source, as can seasonal heat reservoirs that are heated in summer with solar energy and then discharged in winter.

Using waste heat and saving energy
Waste heat, which is dissipated into the environment via cooling towers, is a by-product of many industrial production processes. Exhaust air from air-conditioning systems contains waste heat as well. Heat pumps can use this waste heat and make it reavailable as heat output at a higher temperature level. This type of process optimisation can be used to realise significant energy savings. The advantage of heat pump technology: heat that would not normally be available can be harnessed. For instance, a heat pump can be used to increase the temperature of geothermal energy from 7°C to 40°C.

Heat pumps and chillers from ENGIE Refrigeration
QUANTUM and AMONUM chillers from ENGIE Refrigeration are especially known as highly efficient cooling generators. However, they are also excellently suited as heat pumps, and have already been successfully used for this purpose by various industrial customers – often for combined heating and cooling. The integrated optimisation of their energy use has enabled these customers to achieve substantial energy savings and in turn noticeably lower their operating costs. A very welcome side effect: CO₂ emissions are significantly reduced as well, and customers make a decisive contribution to environmental protection.

The experts at ENGIE Refrigeration always consider individual requirements and conditions on-site. This enables them to apply their expertise and experience and realise relevant savings potential for heat and cooling applications.