Heat storage More flexibility in the electricity and heat market

On the way to a renewable and efficient energy supply, innovative heat storage systems at temperatures above 300°C can play an important role in the future. Integrating this type of storage system in thermal power plants, for example, can make operation much more flexible, benefiting both electricity and heating markets. RWE is therefore investigating the different types of thermal energy storage with regard to possible applications.

There are a variety of options for storing heat at high temperatures, each with its own specific characteristics.



Heat storage in solids

(e.g. ceramic shaped bricks or riprap)



Heat storage in liquids (e.g. thermal oils, liquid salts or liquid metals)



Heat storage in gases (e.g. water vapour)



Heat storage in substances with phase change (e.g. liquid salts, p-toluic acid)

In our StoreToPower project, we worked with partners to investigate the feasibility of a heat storage system at a power plant site. Click here to go to our "Store to Power" heat storage project.

