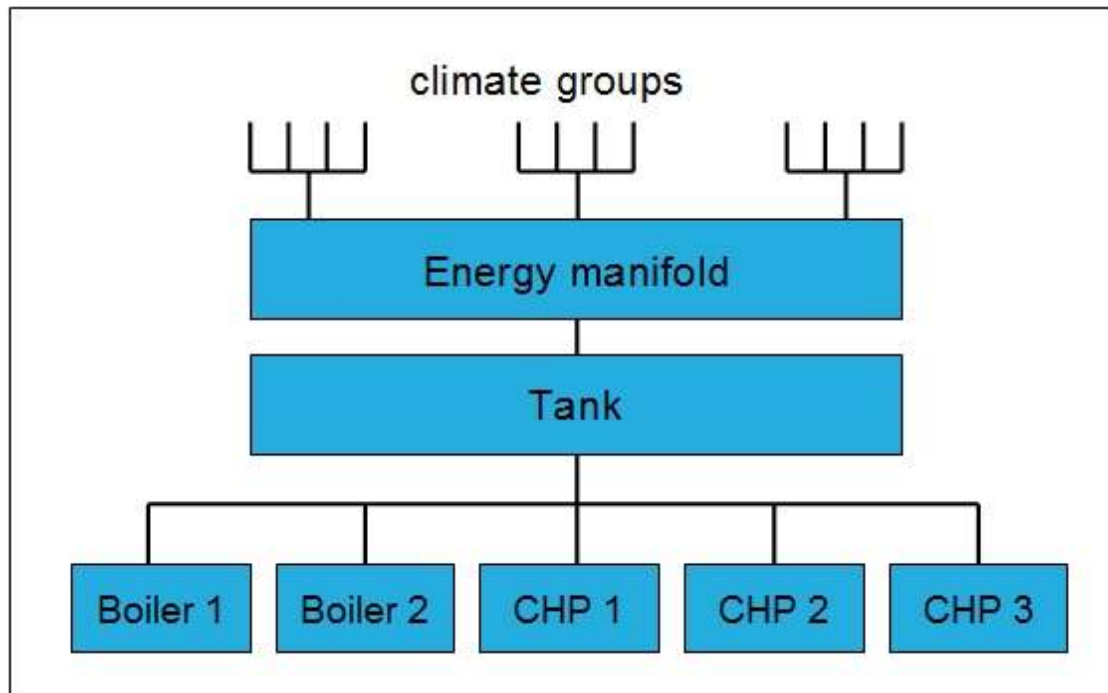

Energy

The Energy Management can consist of the following program parts:

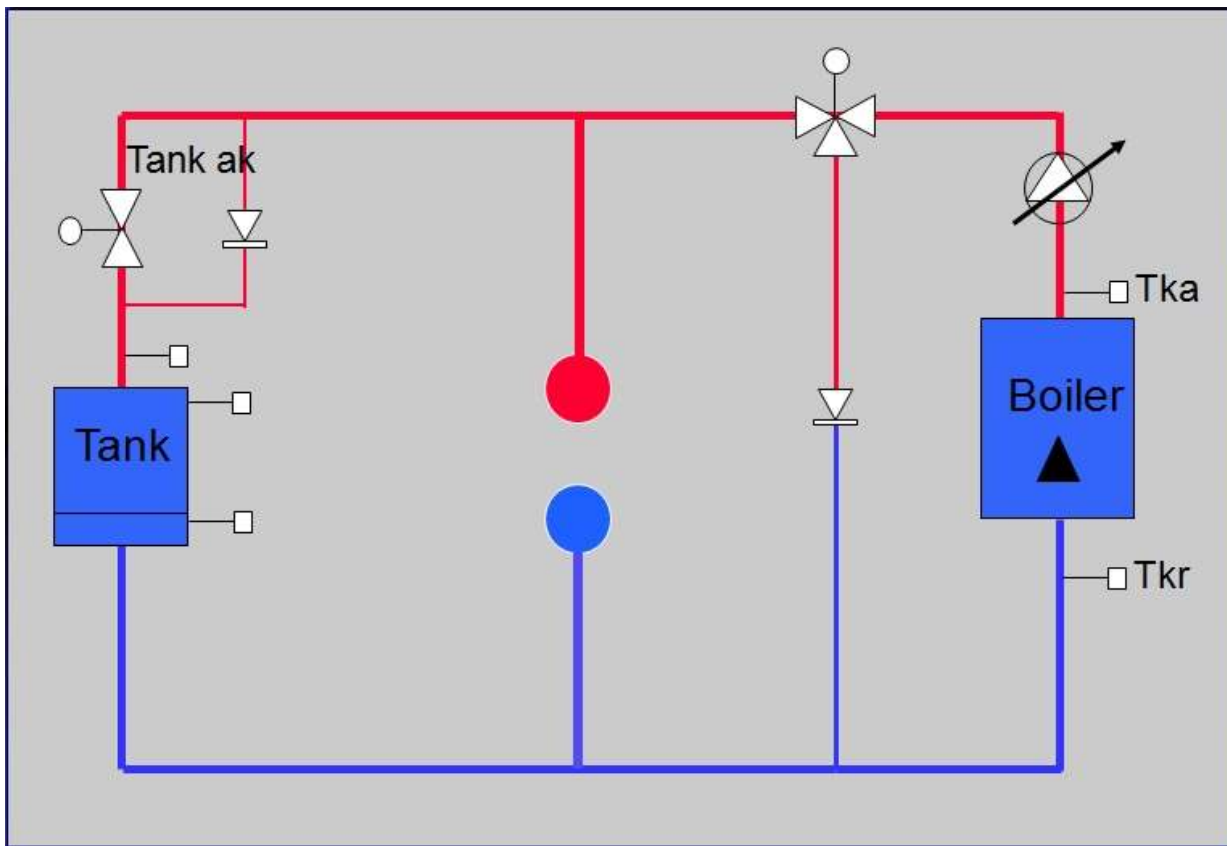
1. Boiler
2. CHP
3. Heat storage tank
4. Energy manifold

Schematically coupled as follows:

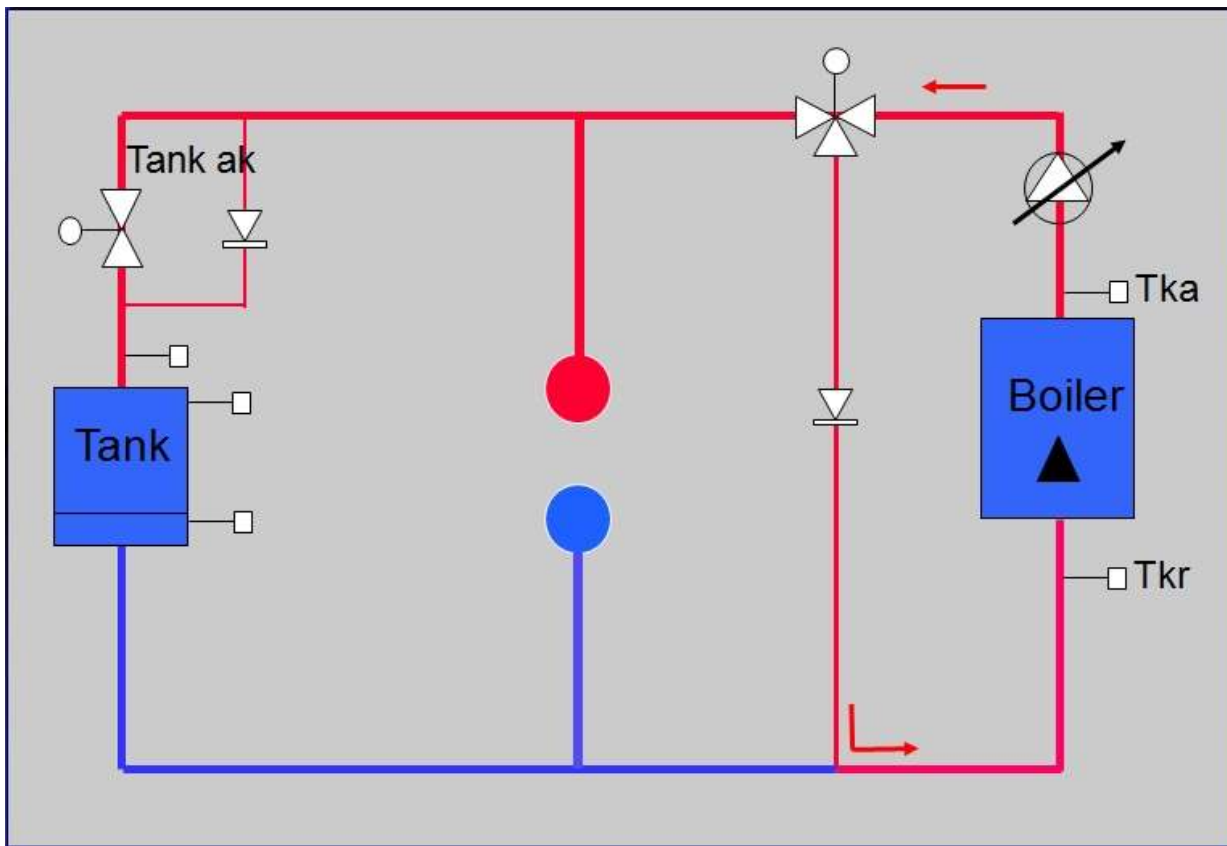


The boilers provide heat and CO₂, the CHP can also supply heat and CO₂ supply. Today, the heat storage tanks are designed as "open buffer system". This means that the supplied heat is going to the greenhouse when there is heat demand. If there is no heat demand, the heat is going into the tank.

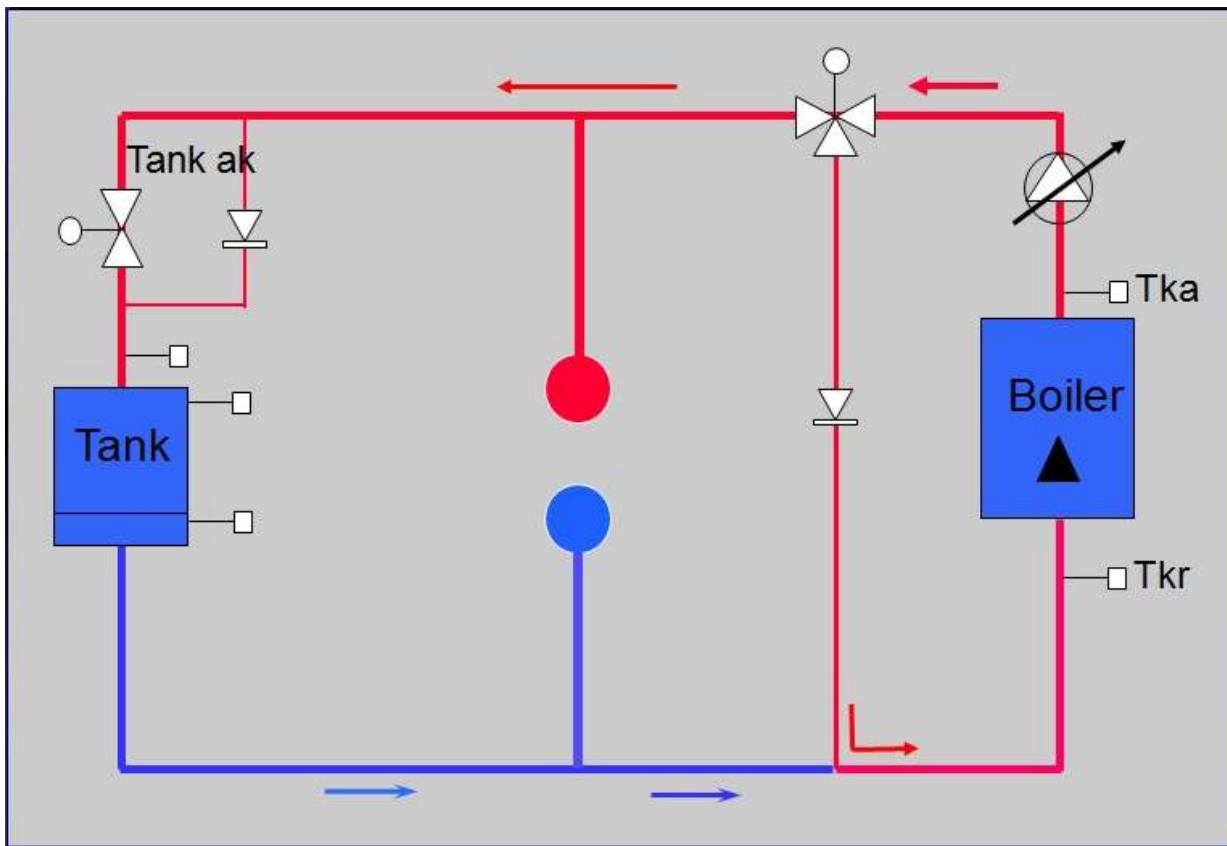
An open buffer system looks schematically as follows:



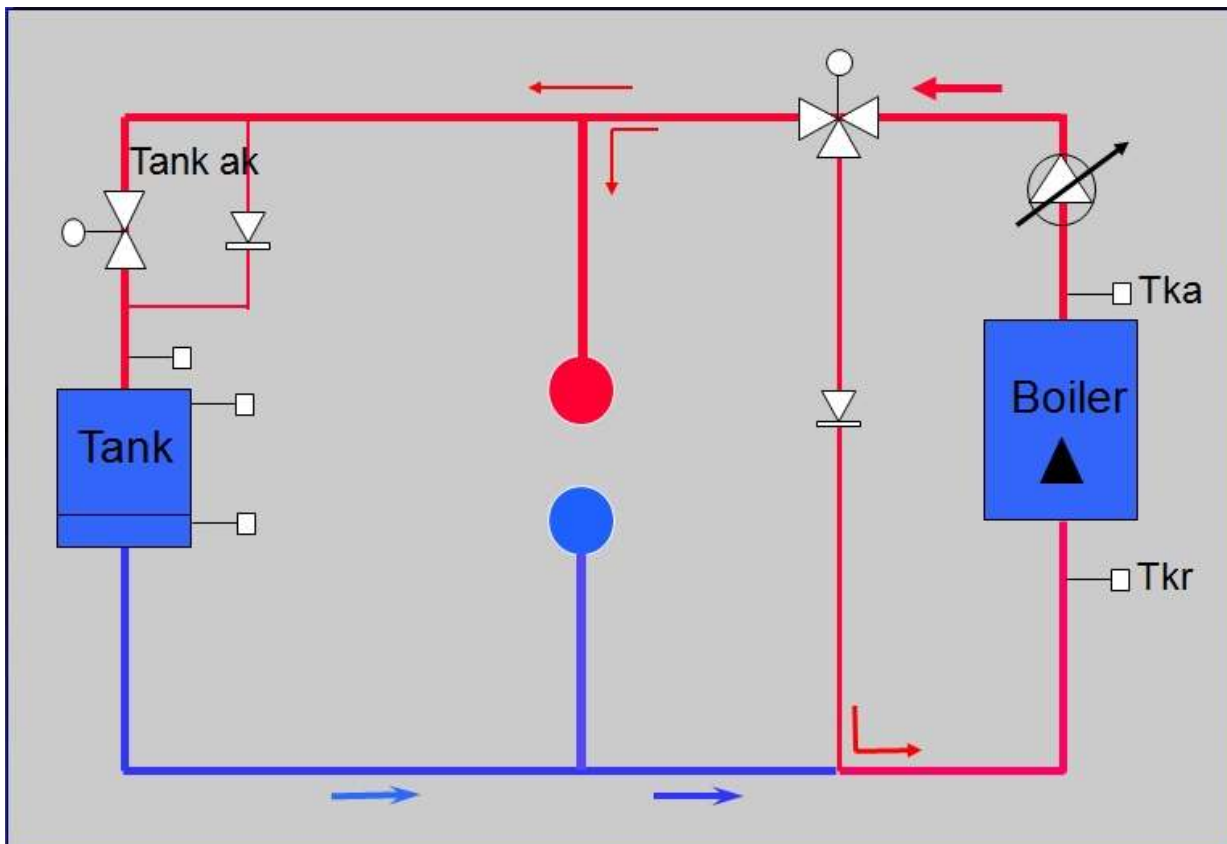
The boiler starts and gets warm. Return water is mixed:



If there has been no demand in the greenhouse, then the hot water is going to the tank:



At a small demand, the hot water distributes:



At a large demand, tank and boiler water is going to the greenhouse:

