Cooling tower make-up water
The Netherlands, 2900 m³/day

Project Description:
Lenntech has engineered, installed and commissioned a high recovery CCRO system, to produce high purified water as make-up water. This allows a reduction of water consumption by 20% in the cooling units, and consequently waste water (blow-down) minimization. Purified water availability is of extreme importance of the end-user. First, chemical injection is done, to fit the CCRO feed recommendations and minimize fouling and scaling in the cooling tower. Then, 2 independent CCRO produce 120 m³/h of permeate at 93% recovery, also resulting in a reduction of brine production. The system is equipped with top-brand equipment to allow a full control on chemical uses and CCRO settings.

Scope of Work:
▪ Engineering, manufacturing and assembly
▪ Feed and distribution pumps
▪ Closed-Circuit Reverse Osmosis (CCRO) unit
▪ Chemical dosing stations
▪ Siemens PLC
▪ Skid mounted system
▪ Top brand instrumentation
▪ Top brand equipment
▪ Containerization
▪ Site commissioning
▪ Remote monitoring
▪ Service and maintenance

Project duration:
May 2018 to July 2019

Project location:
The Netherlands

Product quality:
Conductivity < 100 uS/cm

Project application:
Cooling tower make-up Water

Typical Return on Investements:
< 3 months