

# Steam generation systems design



PIPING HYDRAULIC & THERMAL ANALYSIS

## COMPANY PROFILE

**AALBORG CSP**  
- Changing Energy

**Aalborg CSP A/S**  
[www.aalborgcsp.com](http://www.aalborgcsp.com)

Aalborg CSP A/S is a leading developer and supplier of innovative renewable technologies aiming to change the way energy is produced today.

Relying on extensive experience from some of the most efficient concentrated solar power (CSP) projects around the world, the company designs and delivers green technologies and integrated energy systems to lower cost of energy for industries and power plants worldwide.

**Field of activities**  
Power Industry

[passuite.com/user-stories/13](http://passuite.com/user-stories/13)

## Project Description

**Region**  
UAE

**Dates**  
2018-2022

**PASS software used**  
PASS/HYDROSYSTEM

### Scope

The project scope included steam generation systems design and analysis for the Noor Energy1, 950MW hybrid solar power project in Dubai, the today world largest CSP plant, able to produce electrical power 24/7.

### Project Specific

The project challenge was to obtain the most optimal design regarding the pressure loss in the system, as the pressure drop is directly influencing the total efficiency of the steam cycle.

### How PASS software helped in the project execution

Previously the company used inhouse developed, less effective software, to make the pressure drop calculations. PASS software significantly reduced the time for making the pressure drop engineering and producing the pressure drop documentation. Much time was saved, due to the ability of the PASS software to import the 3D pipe models directly from the flex calculation software used in the project.

### Results

All pressure drop calculations were issued on time and met the project requirements.

