

## **ABSTRACT**

Middle-East and North Africa (MENA) region as a major supplier of fossil fuels is eligible to become a major clean solar energy production area. The huge solar potential in MENA is pushing investments mainly towards CSP and with less interest to PV technologies. The two technologies are now in an open competition but PV is still leading with a comfortable ranking as a third source of Renewable energy. CSP technology still needs technical and economical improvement although it's thermodynamically consistent. Of course, it is of strategic interest that these two technologies compete against fossil sources than entering into "cannibalization" race. For all case studies we used TRNSYS with NREL SAM Advisor Environments to compare technico-economic performances of CSP and PV plants. CSP technology LEC is under 10 €/kWh but higher than the PV LEC. But when it comes to power plants with storage then the two technologies costs are comparable. According to the simulation results PTC solar has the favors