SHAMS 1 CONCENTRATED SOLAR THERMAL USING PARABOLIC TROUGH

SHAMS Power Company

A subsidiary of MASDAR

In association with TotalEnergies, صندوق أبوظبي للتقاعد Abu Dhabi Pension Fund

MAIN FEATURES OF SHAMS 1

- Power output of 100 MW
- Uses solar thermal collectors to concentrate the heat from direct sunlight
- Uses sustainable and renewable energy to produce electricity
- Will save 175,000 tonnes of CO_2 every year, equivalent to planting 1.5 million trees or taking 15,000 cars off the road
- Power supplied will be enough for 20,000 U.A.E homes
- One of the largest Concentrated Solar Power (CSP) plants worldwide
- The size of the plant site is around 2.5 km^2
- The solar field consists of 768 units of Solar collector assemblies
- 192 parallel loops with four series connected collectors
- The Solar field includes 258,048 mirrors that take up a total mirror aperture of 627,840 m^2
- Collectors – high reliability, optical performance & a state- of-the-art design that reduces production and assembly costs

OPERATIONS PROCESS