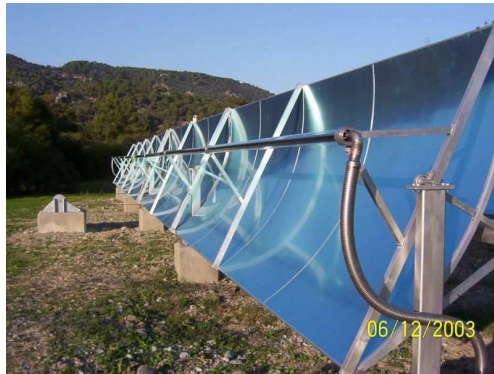


## 17. Solar powered air conditioner, heating and co-generation

Solar Air Conditioning system is based on Solar Energy, which is FREE forever, resulting in tremendous savings on electricity bills. Vapor absorption machine which requires heat to produce chilled water is connected



17.1

to solar parabolic trough where heat is produced using solar energy. Evacuated tubes with parabolic trough gives the good efficiency compared to flat plate collector type.

Approximate cost of Rs. 120 K (\$2400) per ton of air-conditioning and it includes vapor absorption machine, solar troughs, pumps, chilled water pipes, air handling units and air distribution system. If the building is designed well, one ton can serve approx 400 sqft to 700 sqft depending on the climate conditions (McD BERL designed for an office space with similar loads)



17.2

