

Chapter 08

CONCLUSIONS

It can be finally concluded that a 50MW central receiver type solar thermal power plant at Tanamalwila area is technically feasible with available solar resources. However an onsite DNI survey has to be carried out as the solar resources database is a modeled estimation.

When it comes to the economic feasibility, a 50MW central receiver type solar thermal power plant at Tanamalwila is economically feasible if the forecasted price reduction of central receiver type technology is decreased up to Sargent & Lundy report's long term price forecast.

And the Ceylon Electricity Board should accept a Power Purchase Agreement with the IPP for an electricity sales price begins from 10.32 cents USD/kWh and having an annual escalation rate of 1%.

Further, to make this project a reality, the project developers shall obtain a 20 year soft loan with a loan interest rate not exceeding 4% from an international development bank such as Global Environmental Facility (GEF), World Bank or Japan International Cooperation Agency (JICA). Further, Board of Investment (BOI) approval for 15 year tax holiday and 8% IRR are also crucial to produce electricity for 8.55 cents USD/kWh of real LCOE.