Technology Fact Sheet for Mitigation

Technology	Description	Benefits	Challenges
PV CSP [i]	CSP is the conversion of sunlight into electricity, indirectly using concentrated solar power (CSP).Concentrated solar power systems use lenses or mirrors and tracking systems to focus a large area of sunlight into a small beam to boil water which produces steam which then later expands on traditional steam turbines to generate electricity. CSP has relatively lower investment costs, O+M costs, and levelised costs compared to PV Utility at 5000-7300 US$/kW, 60-82 US$/kW and 16-25 US$ cents/kWh.	CSP although at its final stage of commercialisation is beginning to be competitive compared to other technologies. It has similar GHG benefit emissions as PV Utility. Capacity factor 35-42%.	In terms of costs although relatively higher than other technologies, it is more competitive than PV Utility.

[i] **This fact sheet has been extracted from TNA Report – Technology Needs Assessment and Technology Action Plans For Climate Change Mitigation– Zambia. You can access the complete report from the TNA project website http://tech-action.org/**