**Technology Fact Sheet for Mitigation**

| Technology | Description | Benefits | Challenges |
|---|---|---|---|
| Solar home systems [i] | A SHS typically includes a photovoltaic (PV) module, a battery, a charge controller, wiring, fluorescent DC (direct current) lights, and outlets for other DC appliances. A standard small SHS can operate several lights, a black-and-white television, a radio or cassette player, and a small fan. The size of the system (typically 10 to 100Wp) determines the number of 'light-hours' or 'TV-hours' available. For example, a 35Wp SHS provides enough power for four hours of lighting from four 7W lamps each evening, as well as several hours of television | A SHS can eliminate or reduce the need for candles, kerosene, liquid propane gas, and/or battery charging, and provide increased convenience and safety, improved indoor air quality, and a higher quality of light than kerosene lamps for reading | This system can serve offgrid system customers particularly in rural areas where the national grid does not reach, but requires an innovative financing system to support rural inhabitants with end use micro finance for purchase of SHS |

[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/**