

Technology Fact Sheet for Mitigation

Technology	Description	Benefits	Challenges
Hydro power ⁱ	This measure involves development of hydro electricity projects which have been elaborated in Zambia's energy electricity supply plan.	These projects are already planned for implementation in Zambia energy supply for the period up to 2030. Once implemented in conjunction with CDM arrangement these projects, can significantly reduce GHG emissions in Zambia region and offer significant additional revenue base for the utilities involved. Besides, hydropower projects are cost effective and reliable which could result in social economic environmental benefits and have the lowest investment costs (1,000-3,000 US\$/kW), O+M costs(25-75 US\$/kW), levelised costs 1.1-11.0 US\$ cents). Capacity factor 30-60%.	The only challenge is environmental concern associated with construction of big dams. The process of damming a river and creating a reservoir can pose its own environmental, economic, health and social problems, among which are the displacement of floodplain residents and the loss of the most fertile and useful land in a given area.

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/>